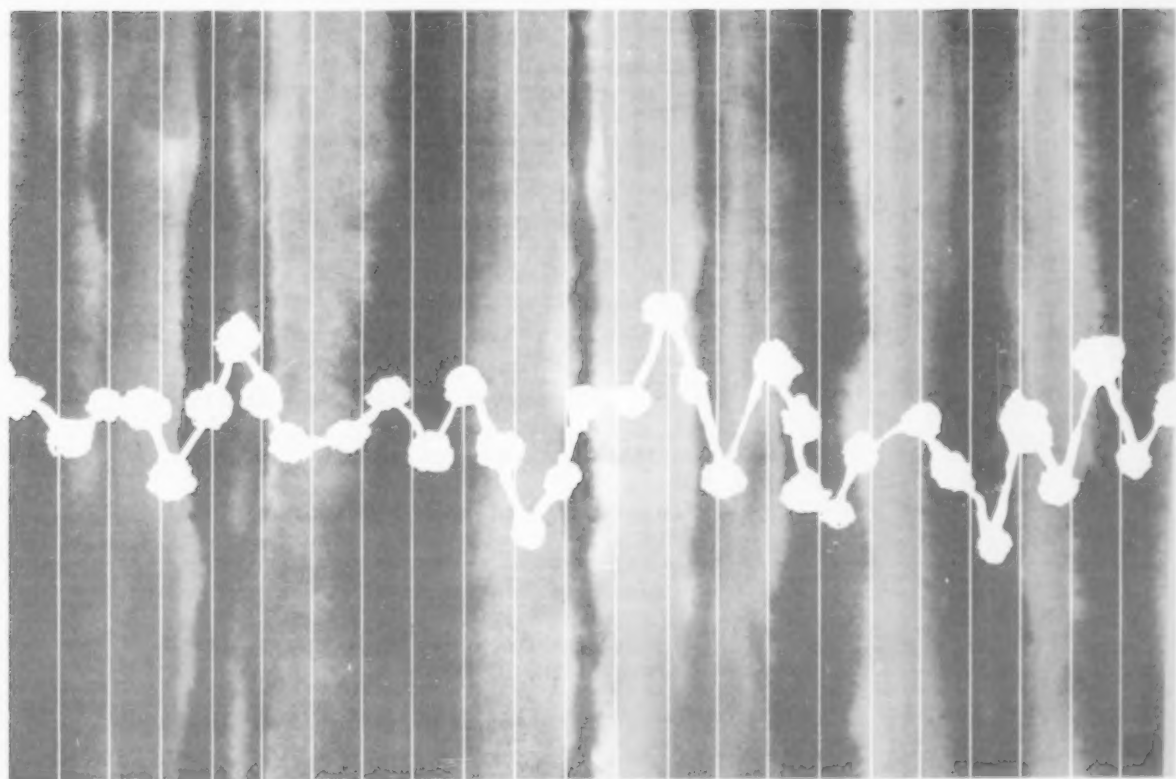


defense indicators

OCTOBER 1977



U.S. DEPARTMENT OF COMMERCE • BUREAU OF ECONOMIC ANALYSIS



This report is prepared in the Statistical Indicators Division, Bureau of Economic Analysis. Technical staff and their responsibilities for the publication are—

Barry A. Beckman—Technical supervision and review.

Morton Somer—Selection of seasonal adjustment methods.

Betty F. Tunstall—Collection and compilation of basic data.

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The Secretary of Commerce has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this Department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through September 1, 1980.

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defense indicators

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6 BEA PROJECTS for economic analysis

BUSINESS CONDITIONS DIGEST A monthly report for analyzing economic fluctuations over a short span of years.

This report brings together many of the economic time series found most useful by business analysts and forecasters. The dominant feature is the cyclical indicators section in which approximately 110 business cycle indicators are each assigned a three-way timing classification according to their cyclical behavior at peaks, at troughs, and at all turns. This section also contains other valuable aids for the analysis of business conditions and prospects, such as composite indexes of leading, coincident, and lagging indicators and various diffusion indexes. A second section contains other important economic measures such as prices, wages, productivity, government activities, U.S. international transactions, and international comparisons.

Data are presented in charts and tables. Appendixes provide historical data, series descriptions, seasonal adjustment factors, and measures of variability. A computer tape containing data for most of the series is available for purchase.

DEFENSE INDICATORS A monthly report for analyzing the current and prospective impact of defense activity on the national economy.

This report brings together the principal time series on defense activities which influence short-term changes in the national economy. These include series on obligations, contracts, orders, shipments, inventories, expenditures, employment, and earnings. The approximately 60 time series included are grouped in accordance with the time at which the activities they measure occur in the defense order-production-delivery process. Charts and analytical tables facilitate interpretation.

LONG TERM ECONOMIC GROWTH A report for the study of economic trends over a long span of years, 1860-1970.

This report has been developed from available statistics to provide a comprehensive, long-range view of the U.S. economy. It is a basic research document for economists, historians, investors, teachers, and students. It brings together under one cover, in meaningful and convenient form, the complete statistical basis for a study of long-term economic trends. A computer tape file of the time series included in the report is available for purchase.

COMPUTER PROGRAMS FOR TIME SERIES ANALYSIS The source statements for FORTRAN IV programs used by BEA in its analysis of time series are available on a single computer tape.

SEASONAL ADJUSTMENT PROGRAMS.—Two variants of the Census computer program for measuring and analyzing seasonal, trading-day, cyclical, and irregular fluctuations. They are particularly useful in analyzing economic fluctuations which take place within a year. The X-11 variant is used for adjusting monthly data and the X-11Q for quarterly data. These programs make additive as well as multiplicative adjustments and compute many summary and analytical measures.

DIFFUSION INDEX PROGRAM.—A computer program for computing diffusion indexes, cumulated diffusion indexes, and summary measures of the properties of each index.

SURVEY OF CURRENT BUSINESS A monthly report for analyzing current economic developments.

This report provides a useful combination of current data for more than 2,500 statistical series and significant articles analyzing economic developments. These data and analyses include such areas as the national income and product accounts, the balance of payments accounts, plant and equipment expenditures, regional personal income, and the input-output accounts.

BUSINESS STATISTICS A biennial reference volume containing statistical series reported currently in the *Survey of Current Business*.

This report provides historical data back to 1947 for nearly 2,500 time series. The series are accompanied by concise descriptions as to their composition, methods of compilation, comparability, revisions, and availability. Also listed are the names and addresses of organizations which provide the basic data for the series.

Introduction

The purpose of this monthly report is to bring together the principal time series on defense activity which influence short-term changes in the national economy. These include series on obligations, contracts, orders, shipments, inventories, expenditures, employment, and earnings. Most are monthly but a few quarterly series are included. The series numbers used are for identification purposes only and do not reflect relationships or order.

Classification of Series

Chart 1 compares Government purchases of goods and services for national defense with total gross national product. GNP is the market value of the final output of goods and services produced by the Nation's economy and represents a very broad measure of aggregate economic activity. In addition to national defense purchases, it includes Federal Government purchases of goods and services for nondefense purposes, State and local government purchases, personal consumption expenditures, gross private domestic investment, and net exports of goods and services. Chart 1 also presents national defense purchases as a percent of gross national product and, for both series, changes from the previous quarter.

A related group of series is shown in Chart 4, "Defense Related Balance of Payments Components." These series show the effects of defense-related economic activity on the balance of payments accounts.

The remaining series are grouped in accordance with the time at which the activities they measure occur within the defense order-production-delivery process. Those series measuring activities that usually precede production, such as new orders placed with defense products industries and contract awards, are presented in Chart 2, "Advance Indicators of Defense Activity." Chart 3, "Intermediate and Final Indicators of Defense Activity," presents series that measure activities which tend to move at the same time as production (such as employment) and activities which usually follow production (such as shipments).

Series Included

Following is a list of the series as they appear in charts 1, 2, 3, and 4 (the source agencies are abbreviated in parentheses; detailed lists of sources for charts 1, 2, and 3 appeared as appendixes to the August and October 1968 issues of this report).

Gross National Product and National Defense Purchases

- Gross national product (BEA)
- Federal Government purchases of goods and services, national defense (BEA)
- National defense purchases as a percent of gross national product (BEA)
- Gross national product, changes from previous quarter (BEA)
- National defense purchases, changes from previous quarter (BEA)

Advance Indicators of Defense Activity

- Defense Department gross obligations incurred, total (DOD)
- Defense Department gross obligations incurred, procurement (DOD)
- Gross obligations incurred outside the Government for national defense (Treasury)

- Defense Department military prime contract awards for work performed in the United States (DOD)
- Defense Department gross unpaid obligations outstanding (DOD)
- Manufacturers' new orders (Census):
 - Defense products industries
 - Defense products
- Manufacturers' new orders from the U.S. Government, aerospace industries (Census):
- Average weekly overtime hours, production workers, defense products industries (BLS)
- Accession rate, defense products industries (BLS)
- Layoff rate, defense products industries (BLS)

Intermediate and Final Indicators of Defense Activity

- Output of defense and space equipment (FRB)
- Manufacturers' inventories (Census):
 - Defense products industries
 - Defense products
- Manufacturers' unfilled orders (Census):
 - Defense products industries
 - Defense products
- Manufacturers' unfilled orders from the U.S. Government, aerospace industries (Census)
- Defense Department progress payments outstanding (DOD)
- Employment in defense products industries, total (BLS)
- Employment in defense products industries, production workers (BLS)
- Index of aggregate weekly hours, defense products industries (BLS)
- Index of aggregate weekly payrolls, production workers, defense products industries (BLS)
- Defense Department personnel, military, active duty (DOD)
- Defense Department personnel, civilian, direct hire employment (DOD)
- Defense Department net outlays, total, military functions and military assistance (DOD)
- Defense Department net outlays, procurement (DOD)
- Budget outlays for the national defense function (Treasury)
- Defense Department personnel compensation (DOD)
- Manufacturers' shipments (Census):
 - Defense products industries
 - Defense products
- Manufacturers' shipments to the U.S. Government, aerospace industries (Census)
- Ratio, manufacturers' unfilled orders to shipments (Census):
 - Defense products industries
 - Defense products
- Ratio, manufacturers' inventories to shipments (Census):
 - Defense products industries
 - Defense products

Defense-Related Balance of Payments Components

- Transfers under U.S. military agency sales contracts—exports (BEA)
- Direct defense expenditures—imports (BEA)
- U.S. Government cash receipts associated with military sales contracts (BEA)

Some additional data are included in the tables though not presented in the charts. These include Defense Department military prime contract awards by procurement category (e.g., for aircraft, missiles and space systems, ships, weapons, and ammunition), the operations component of Defense Department

gross obligations incurred, gross unpaid obligations outstanding, and net outlays and the procurement component of gross unpaid obligations outstanding.

Description of Basic Data

The Department of Defense compiles statistics on obligations, contract awards, personnel compensation, and outlays. The DOD obligations and outlays data are based on the Defense Department's monthly *Status of Funds* report which is developed from accounting data and is designed to provide information on the total status of Defense Department financing. Accounts included in this report are aggregated by appropriation categories including personnel costs, operations and maintenance, procurement, research and development, and construction. The *Status of Funds* report duplicates some obligations. That is, obligations of one government unit to another unit are not netted out.

The Defense Department's *Contract Awards* report covers the awarding of procurement contracts. These include obligations for operating and maintenance supplies, equipment and services, research and development, and construction in addition to the obligations for items that constitute the fiscal "procurement" category. The statistics are aggregated by commodity categories including aircraft, missile and space systems, ships, weapons, ammunition, electronics and communication equipment, fuels, and textiles and clothing. The *Contract Awards* report includes procurement for NASA, other nondefense agencies, and the Foreign Military Sales Program which are not included in the *Status of Funds* report.

The Census quarterly new orders, unfilled orders and shipments series for "aerospace industries" are based on reports of companies classified into the following industry categories:

Industry	SIC Code
Aircraft and parts	372
Guided missiles and space vehicles, completely assembled ..	1925

The Census and BLS data for "defense products industries" presented in this report cover companies and establishments¹ classified into the following industry categories in accordance with the *Standard Industrial Classification Manual*, 1967 edition, Executive Office of the President, Bureau of the Budget:

Industry	SIC Code
Ordnance and accessories	19
Communication equipment	366
Aircraft and parts	372

Establishments reporting to the BLS are classified into industries on the basis of their principal product or activity as determined from information on annual sales volume, which is collected each year on a supplement to the monthly report. The entire employment of an establishment making more than one product or engaging in more than one activity is included under the industry accounting for the largest percentage of the annual sales of that establishment.

The Census Bureau's monthly survey is based primarily on reports at the company level and the monthly estimates are benchmarked to the establishment data from the *Annual Survey*

of Manufactures. Also, many of the large diversified companies file separate divisional reports monthly. Although the reports in the survey are also classified according to their principal product or activity, this difference in the organizational level from which reports are received results in firms being classified into different industries in the BLS and Census surveys and, consequently, limits somewhat the comparability of the data collected by these agencies. However, as we know from past studies in this area, some differences in industrial classification between BLS and Census data would remain even if reports came from the same organizational levels.

Both the Census and the BLS data include a significant amount of nondefense activities carried on by companies and establishments classified in the above industries. For example, the data cover the production of commercial as well as military aircraft. On the other hand, they exclude significant amounts of defense work carried on by companies and establishments classified in industries other than those listed above (e.g., the manufacture of military uniforms and the shipbuilding industry).²

Census data for "defense products" are based on separate reports on defense work filed by large defense contractors in the ordnance, communications, complete aircraft, aircraft parts, and shipbuilding industries. Thus, they differ from the "defense products industries" data in that they include defense activity in the shipbuilding industry and exclude nondefense work in the other industries covered. Defense products data cover work for the Department of Defense and exclude contracts for the National Aeronautics and Space Administration and the Atomic Energy Commission.

The DOD data are not strictly comparable in coverage with either the BLS or the Census data since the Defense Department figures (1) cover products of industries not included in the defense products category; (2) generally do not include non-defense activities (except that some series, such as contract awards, include activities by the Department of Defense on behalf of nondefense agencies); and (3) do not cover intermediate activities such as those related to subcontracting and supplying of parts. Thus, the Census Bureau data for manufacturers' new orders and shipments of defense products industries, for example, differ in coverage from the DOD contract awards and net outlays series.

The Department of Defense data are not comparable with Federal Government purchases of goods and services for national defense or the Treasury Department obligations and outlays data since the BEA and Treasury data cover defense-related activities of other agencies such as the Atomic Energy Commission, the Selective Service System, and the Office of Emergency Planning.

Projects to improve the comparability of the data collected by the Bureau of the Census, the Bureau of Labor Statistics, and the Department of Defense and to improve the separation of defense and nondefense activity for the Census and BLS data are being undertaken by the statistical agencies under the leadership of the Interagency Committee mentioned earlier in this report.

¹An establishment is a single physical location where business is conducted (e.g., a plant). A company often includes more than one establishment.

²See the Bureau of the Census publication *Shipments of Defense-Oriented Industries*, Current Industrial Reports, Series MA-175, for annual estimates of shipments by industry to the Department of Defense, the National Aeronautics and Space Administration, and the Atomic Energy Commission. Included also are industries not covered by the "defense products industries" category.

Variability of Data

Seasonal variations dominate the movements of many time series, and adjustments for average seasonal fluctuations are often necessary to bring out the underlying trends of the series. These seasonal adjustments allow for the effects of repetitive intrayear variations resulting primarily from normal differences in weather conditions and from various institutional arrangements. An additional adjustment is sometimes necessary for series which contain considerable variation resulting from the number of working or trading days in each month. As used in this report, the term "seasonal adjustment" includes trading-day adjustments where they have been made.

Most of the series in this report are shown in seasonally adjusted form. For Defense Department and BLS series, unadjusted data are also shown since they are not readily available elsewhere. Current seasonal adjustment factors are shown in appendix A.

The effect of seasonal adjustment in reducing the month-to-month variation in the data can be seen in appendix B. There, the first two columns show the average month-to-month percent change (without regard to sign) in the data before and after seasonal adjustment. Some series still show very irregular month-to-month movements after adjustment for seasonal variation. The measures in appendix B also indicate the month-to-month variation in the irregular and short-term trend components of the series. For many series, irregular movements tend to dominate 1- or 2-month comparisons, and the underlying short-term trend becomes dominant in comparisons over longer spans. The "months for cyclical dominance" (MCD) measure estimates the span of months required for the short-term trend to dominate the irregular component. Series with an MCD of 4 or more are supplemented with a moving average (with the

number of terms equal to MCD) in the charts. Data for these moving averages are listed in the basic data tables.

Guide to Charts and Tables

Most series are plotted on a standard ratio scale so that equal percent changes cover the same vertical distance. For these series, an increase of 100 percent covers approximately 1 inch. Arithmetic scales are used for series with zero or negative data, series which could approach zero (e.g., average overtime hours and layoff rate), and series expressed in percent.

In general, monthly data are plotted with a solid line and quarterly data are represented by a solid line with quarterly plot points. Quarterly series are also identified with a "Q" after their titles. For series which include a moving average, a dashed line is used for the actual monthly data and a solid line for the moving average. (The moving average values are centered within the span of months they are computed from.) Exceptions to this scheme may be necessary for special situations. Data apply to the whole period except for series designated "EOM" (end of month) or "EOQ" (end of quarter). The number in the box at the right of each series indicates the latest month (Arabic) or quarter (Roman) plotted. Parallel lines across a series indicate a break in continuity (e.g., data not available or change in series definition).

Tables 1, 2, 3, and 4 present current data for the series shown in the charts, including the moving averages. They also include unadjusted data for some series and data for related series which are not plotted. Table A summarizes the most recent data and percent changes for many of the series in the report. Historical data are shown on an intermittent basis in appendix C. (The index indicates the appropriate issue for each series.)

New Features and Changes for This Issue

1. Current seasonal adjustment factors, which are based on historical data patterns, are inaccurate for some defense series because of the change in the Government's fiscal year, and suitable seasonal factors cannot be established at this time. For this reason, seasonally adjusted data are not shown for Defense Department gross obligations incurred (series 617, 619, and 621) and Defense Department military prime contract awards, total (series 625) for the period since May 1977, nor are they shown for the components of military prime contract awards (series 626, 627, 629-637, and 640) for the period since the first quarter 1977. For these series, unadjusted data are shown in the data tables and seasonal adjustment factors on the old basis are shown in appendix A.

2. Appendix C contains historical data for series 200, 264, 546, 547, 613, 650, 653, 654, 655, 657, 664, 666, 670, 671, 673, 675, 689, and 696.

The November issue of *DEFENSE INDICATORS* is scheduled for release on November 30.

Table A. Summary of Recent Data and Current Percent Changes for Principal Defense Indicators

(Preliminary and revised figures are not identified here but the user may consult tables 1, 2, 3, and 4 where such identification is given)

Series title	Unit of measure	Basic data									Percent change				Series number
		Average		1st Q 1977	2d Q 1977	3d Q 1977	July 1977	Aug. 1977	Sept. 1977	July '77 to Aug. '77	Aug. '77 to Sept. '77	1st Q '77 to 2d Q '77	2d Q '77 to 3d Q '77		
		1975	1976												
GROSS NATIONAL PRODUCT AND NATIONAL DEFENSE PURCHASES															
200. Gross national product (BEA)	Ann. rate, bil. dol.	1528.8	1706.5	1810.8	1869.9	1911.3	...	...	...	...	...	3.3	2.2	200
264. Federal Government purchases of goods and services, national defense (BEA) .....	.... do	83.9	86.8	89.7	93.4	97.3	...	...	...	...	...	4.1	4.2	264
613. National defense purchases as a percent of GNP (BEA) ¹	Percent	5.5	5.1	5.0	5.0	5.1	...	...	...	...	...	0.0	0.1	613
ADVANCE INDICATORS OF DEFENSE ACTIVITY															
Defense Dept. gross obligations incurred (DOD):															
617. Total	Ann. rate, bil. dol.	90.5	109.9	117.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	617	
621. Procurement .....	.... do	20.4	24.6	24.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	621
623. Gross obligations incurred outside the Federal Government for national defense (Treasury) .....	.... do	104.1	117.9	126.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	623
625. Defense Department military prime contract awards for work performed in the U.S. (DOD) .....	.... do	43.3	50.1	51.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	625
643. Defense Department gross unpaid obligations outstanding (DOD)	Bil. dol., end of period	41.3	50.1	52.4	53.3	NA	50.7	48.8	NA	-3.7	NA	1.7	NA	643	
648. Mfrs.' new orders, defense products (Census)	Ann. rate, bil. dol.	25.2	29.5	24.2	36.3	23.3	23.2	24.0	22.7	3.4	-5.4	50.0	-35.8	648	
650. Manufacturers' new orders from the U.S. Government, aerospace industries (Census) .....	.... do	18.3	21.2	18.0	25.7	NA	...	...	...	...	...	42.8	NA	650
653. Average weekly overtime hours, production workers, defense products industries (BLS) ²	Hours	2.5	2.5	2.8	3.0	NA	3.0	3.0	NA	0.0	NA	0.2	NA	653	
654. Accruals, defense products industries (BLS) ²	Number per 100 employees	1.4	1.6	2.3	2.2	NA	1.7	NA	NA	NA	NA	-0.1	NA	654	
655. Layoffs, defense products industries (BLS) ² .....	.... do	1.2	0.7	0.5	0.4	NA	0.7	NA	NA	NA	NA	-0.1	NA	655
INTERMEDIATE AND FINAL INDICATORS OF DEFENSE ACTIVITY															
657. Output of defense and space equipment (FRB)	1967=100	80.0	78.4	78.3	80.1	81.0	80.5	81.1	81.4	0.7	0.4	2.3	1.1	657	
659. Mfrs.' inventories, defense products (Census)	Bil. dol., end of period	6.6	6.6	6.5	6.9	NA	6.9	6.9	NA	0.0	NA	6.2	NA	659	
661. Mfrs.' unfilled orders, defense products (Census) .....	.... do	29.2	32.2	30.4	31.9	30.2	31.2	30.7	30.2	-1.6	-1.6	4.9	-5.3	661
664. Manufacturers' unfilled orders from the U.S. Government, aerospace industries (Census) .....	.... do	21.8	21.7	23.0	24.3	NA	...	...	...	...	...	5.7	NA	664
666. Defense Department progress payments outstanding (DOD) .....	.... do	11.3	8.5	8.5	8.7	NA	...	...	...	...	...	2.4	NA	666
Employment in defense products industries (BLS):															
670. Total	Thousands	1,118	1,064	1,066	1,081	NA	1,092	1,085	NA	-0.6	NA	1.4	NA	670	
671. Production workers .....	.... do	570	531	529	540	NA	546	547	NA	0.2	NA	2.1	NA	671
673. Index of aggregate weekly hours, defense products industries (BLS)	1967=100	66.0	62.8	63.4	64.4	NA	65.1	64.6	NA	-0.8	NA	1.6	NA	673	
675. Index of aggregate weekly payrolls, production workers, defense products industries (BLS) .....	.... do	100.5	101.2	107.2	112.6	NA	115.3	115.3	NA	0.0	NA	5.0	NA	675
Defense Department personnel (DOD):															
677. Military, active duty	Thousands, end of period	2,084	2,072	2,075	2,075	2,075	2,079	2,073	2,075	-0.3	0.1	0.0	0.0	677	
678. Civilian, direct hire employment .....	.... do	1,028	995	995	1,009	NA	1,008	998	NA	-1.0	NA	1.4	NA	678
Defense Department net outlays (DOD):															
680. Total, military functions and military assistance	Ann. rate, bil. dol.	88.5	88.3	95.6	93.9	107.7	107.6	100.4	115.2	-6.7	14.7	-1.8	14.7	680	
682. Procurement .....	.... do	16.2	16.4	18.5	17.4	18.8	21.3	18.6	16.7	-12.7	-10.2	-5.9	8.0	682
683. Budget outlays for the national defense function (Treasury) .....	.... do	92.5	89.1	96.7	95.2	NA	113.8	84.6	NA	-25.7	NA	-1.6	NA	683
685. Defense Dept. personnel compensation (DOD) .....	.... do	34.6	35.5	36.1	37.2	NA	37.0	36.2	NA	-2.2	NA	3.0	NA	685
689. Mfrs.' shipments, defense products (Census) .....	.... do	23.7	26.5	31.5	30.5	30.0	30.9	30.0	29.1	-2.9	-3.0	-3.2	-1.6	689
690. Manufacturers' shipments to the U.S. Government, aerospace industries (Census) .....	.... do	17.3	19.1	21.1	20.2	NA	...	...	...	...	...	-4.3	NA	690
691. Ratio, manufacturers' unfilled orders to shipments, defense products (Census)	Ratio	14.5	13.5	11.8	12.5	12.3	12.1	12.3	12.4	1.7	0.8	5.9	-1.6	691	
693. Ratio, manufacturers' inventories to shipments, defense products (Census) .....	.... do	3.1	3.0	2.5	2.6	NA	2.7	2.8	NA	3.7	NA	4.0	NA	693
DEFENSE-RELATED BALANCE OF PAYMENTS COMPONENTS															
546. Transfers under U.S. military agency sales contracts—exports (BEA) ³	Ann. rate, mil. dol.	3,919	5,213	7,380	7,468	NA	...	...	...	...	...	88	NA	546
547. Direct defense expenditures—imports (BEA) ³ .....	.... do	4,795	4,847	5,316	5,612	NA	...	...	...	...	...	296	NA	547
696. U.S. Government cash receipts associated with military sales contracts (BEA) ³ .....	.... do	4,587	8,213	7,968	7,540	NA	...	...	...	...	...	-428	NA	696

NOTE: This table is presented as a convenient summary of the current data for many of the indicators in this report. In many cases, data shown here are rounded to fewer digits or are in different units than those shown in tables 1, 2, 3, and 4. Where available, annual figures are those published by the source agencies; otherwise they (and the quarterly figures for monthly series) are averages or totals of the data as shown in the data tables. Series are seasonally adjusted except for those indicated by ³, which appear to contain no seasonal movement.

NA = not available. ²Differences rather than percent changes are shown for this series.

CHART
1

Gross National Product and National Defense Purchases

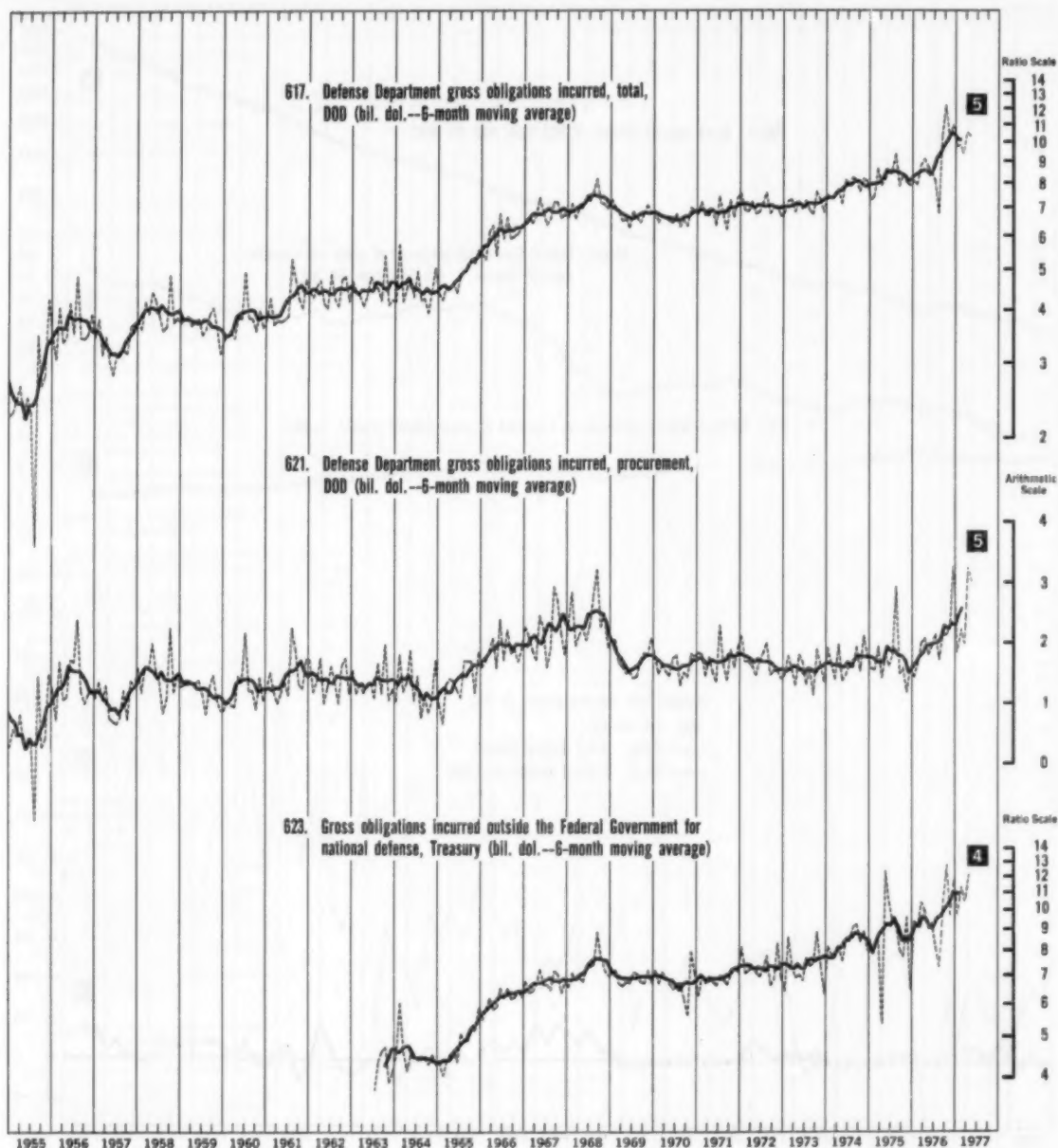


Current data for these series are shown on page 14.

CHART

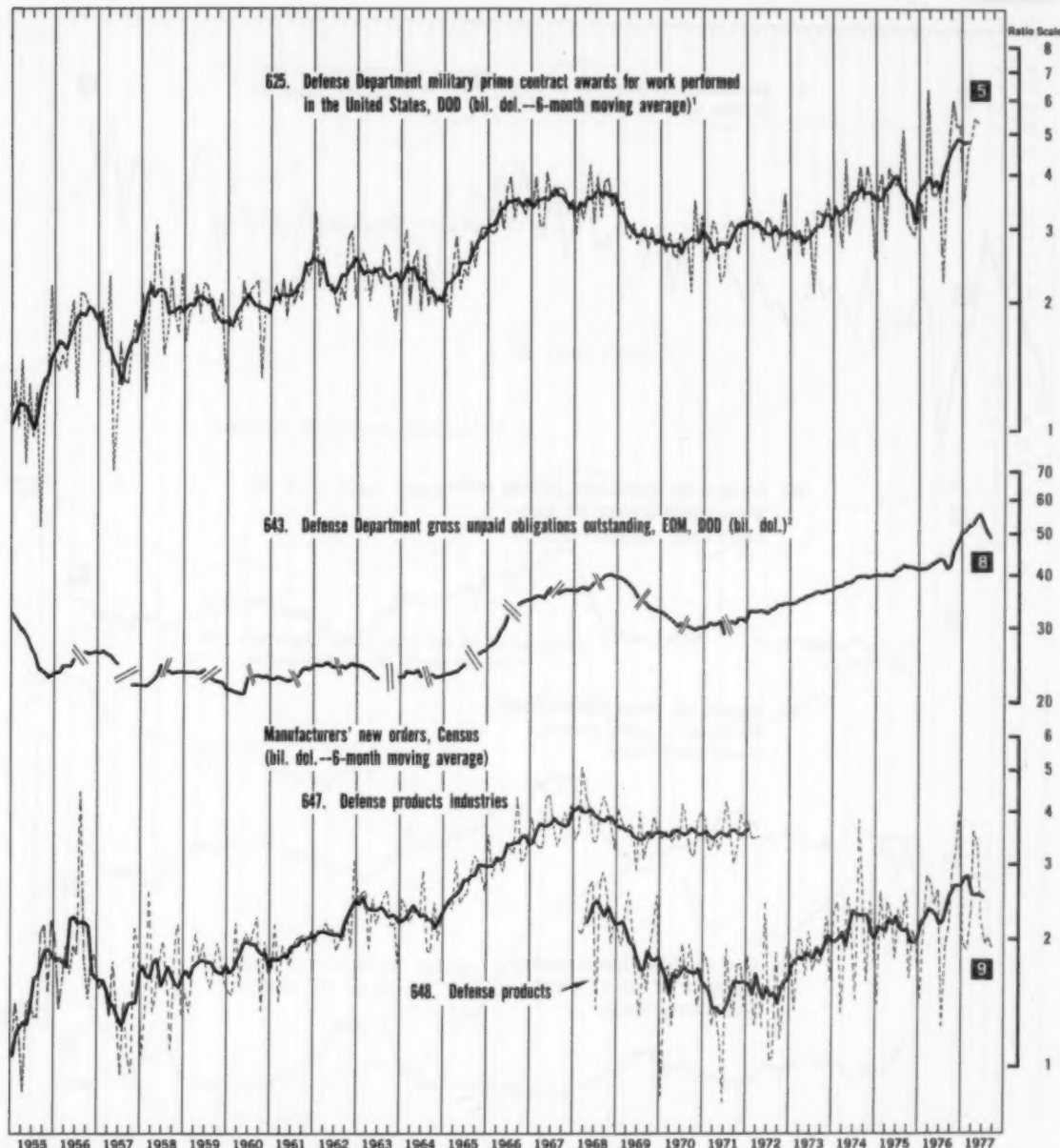
2

Advance Indicators of Defense Activity



Current data for these series are shown on pages 15 and 16.

Advance Indicators of Defense Activity--Continued



¹ Data prior to July 1955 exclude orders written to other Government agencies.

² Data for the following months not available: July of 1956-71; August of 1956-57 and 1963-66; September of 1957, 1963, and 1968; and October and November of 1963. Current data for these series are shown on pages 16 and 20.

defense indicators

CHART

2

Advance Indicators of Defense Activity--Continued

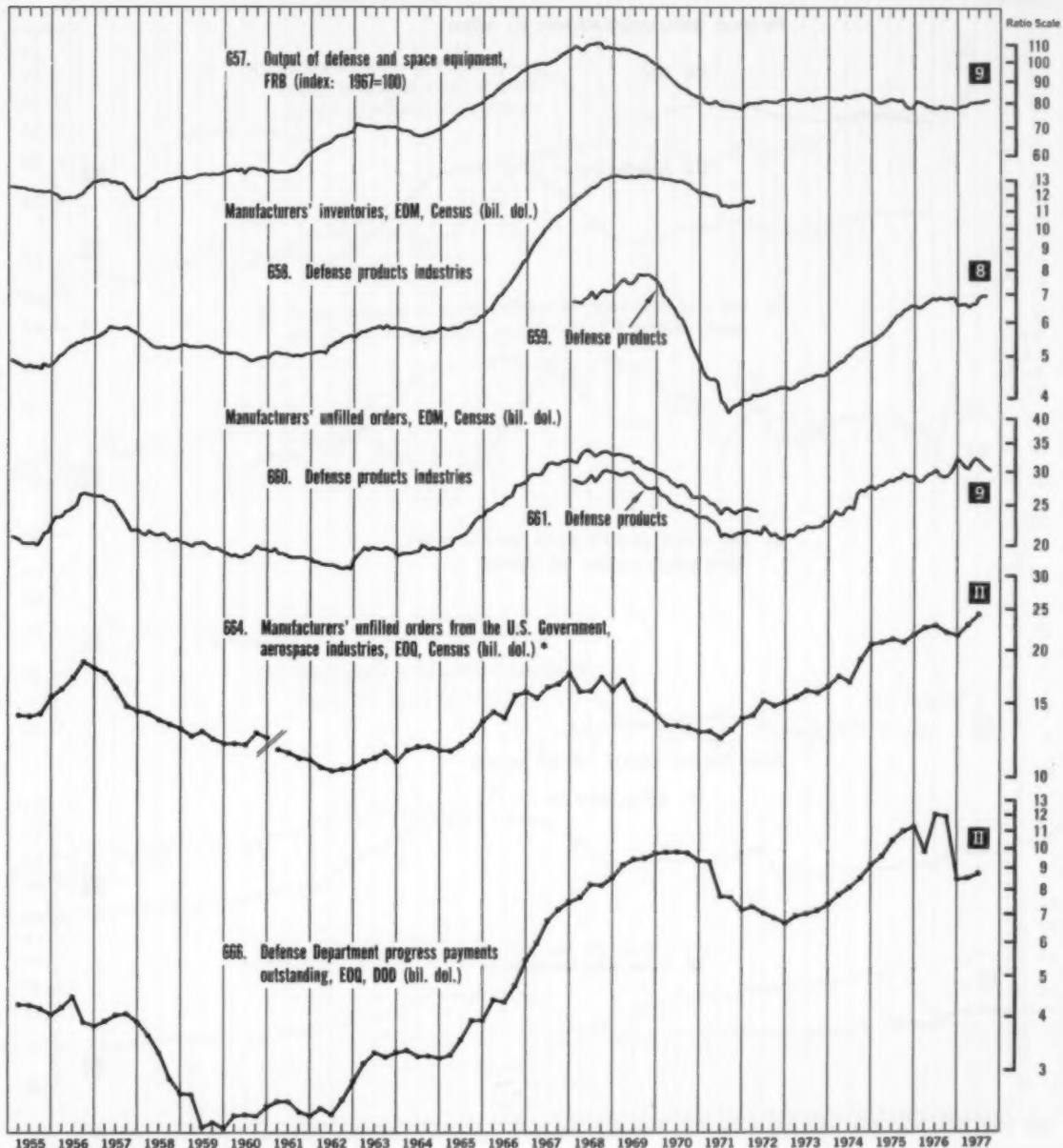


*Data prior to 1961 include orders from non-Government customers.
Current data for these series are shown on pages 20 and 21.

CHART

3

Intermediate and Final Indicators of Defense Activity

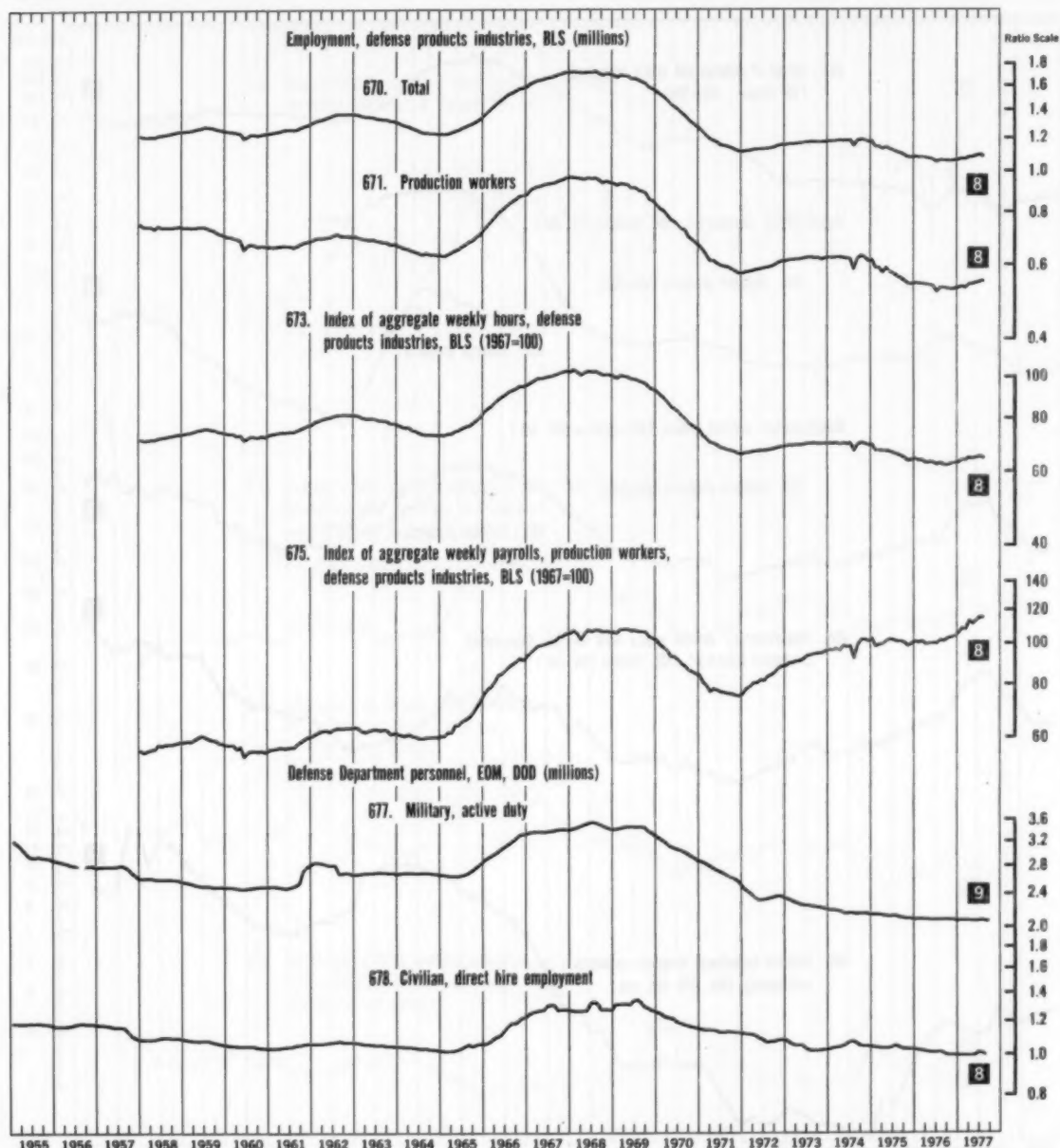


* Data prior to 1961 include orders from non-Government customers.
Current data for these series are shown on page 22.

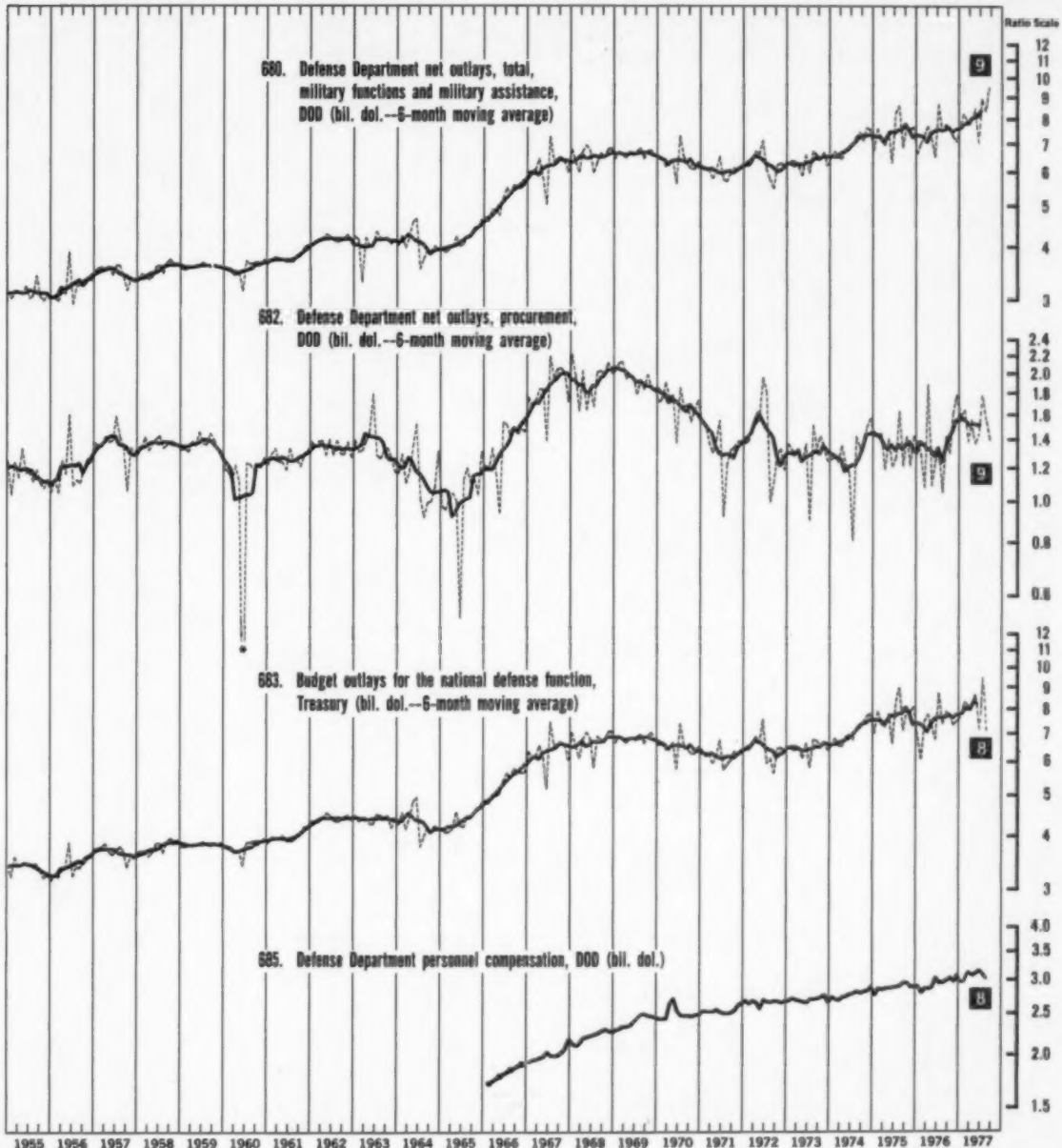
CHART

3

Intermediate and Final Indicators of Defense Activity--Continued



Intermediate and Final Indicators of Defense Activity--Continued



*Net expenditures for procurement, June 1960--\$245 million.
Current data for these series are shown on pages 24 and 25.

CHART

3

Intermediate and Final Indicators of Defense Activity--Continued



*Data prior to 1961 include shipments to non-Government customers.
Current data for these series are shown on page 26.

CHART

4

Defense-Related Balance of Payments Components



* See footnotes 1 and 2 on page 27.

Current data for these series are shown on page 27.

defense indicators

TABLE

1

Gross National Product and National Defense Purchases

Year and quarter	200(a). Gross national product, BEA*	264(a). Federal Government purchases of goods and services, national defense, BEA*	613. National defense purchases as a percent of gross national product, BEA*	200(b). Change in gross national product, BEA*	264(b). Change in Federal Government purchases of goods and services, national defense, BEA*
	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)	(Percent)	(Ann. rate, bil. dol.)	(Ann. rate, bil. dol.)
1973					
First quarter	1,265.3	74.1	5.9	45.9	0.8
Second quarter	1,288.4	73.1	5.7	23.1	-1.0
Third quarter	1,317.5	72.5	5.5	29.1	-0.6
Fourth quarter	1,355.1	74.4	5.5	37.6	1.9
1974					
First quarter	1,369.0	74.6	5.4	13.9	0.2
Second quarter	1,400.1	75.8	5.4	31.1	1.2
Third quarter	1,430.1	77.9	5.4	30.0	2.1
Fourth quarter	1,452.4	79.6	5.5	22.3	1.7
1975					
First quarter	1,453.0	81.6	5.6	0.6	2.0
Second quarter	1,496.6	83.0	5.5	43.6	1.4
Third quarter	1,564.9	84.4	5.4	68.3	1.4
Fourth quarter	1,600.7	86.7	5.4	35.8	2.3
1976					
First quarter	1,651.2	86.3	5.2	50.5	-0.4
Second quarter	1,691.9	86.0	5.1	40.7	-0.3
Third quarter	1,727.3	86.4	5.0	35.4	0.4
Fourth quarter	1,755.4	88.4	5.0	28.1	2.0
1977					
First quarter	1,810.8	89.7	5.0	55.4	1.3
Second quarter	1,869.9	93.4	5.0	59.1	3.7
Third quarter	p1,911.3	p97.3	p5.1	p41.4	p3.9
Fourth quarter					

Note: All data on this page are seasonally adjusted. NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 5.)

Advance Indicators of Defense Activity

TABLE

2

Year and month	Defense Department gross obligations incurred, DOD							
	617. Total			618. Operations		621. Procurement		
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975								
January	8,252	7,341	7,916	5,471	5,148	1,895	1,603	1,772
February	6,904	7,467	7,958	4,604	5,220	1,569	1,575	1,755
March	7,526	8,677	7,956	4,787	5,251	1,994	1,960	1,701
April	7,403	7,933	8,033	5,424	5,209	1,147	1,448	1,674
May	6,796	8,199	8,246	4,761	5,121	1,147	1,813	1,711
June	11,027	8,583	8,569	6,275	5,560	2,693	1,644	1,939
July	9,903	8,614	8,440	6,641	5,624	1,510	1,827	1,865
August	9,812	9,406	8,516	5,337	5,327	2,508	2,940	1,891
September	7,705	7,907	8,494	5,203	5,442	1,506	1,515	1,790
October	9,045	8,387	8,385	6,130	5,660	1,733	1,605	1,784
November	6,976	8,069	8,304	4,829	5,334	1,320	1,206	1,722
December	7,156	7,925	8,064	4,895	5,373	1,428	1,612	1,511
1976								
January	8,652	8,132	8,220	6,010	5,729	1,697	1,453	1,594
February	7,206	7,962	8,344	4,745	5,203	1,664	1,672	1,676
March	8,241	8,842	8,461	4,995	5,354	2,093	2,014	1,779
April	8,677	9,134	8,556	5,946	5,784	1,688	2,096	1,841
May	6,825	8,772	8,553	4,828	5,419	1,155	1,828	1,958
June	11,319	8,491	8,365	5,949	5,059	3,218	1,983	1,971
July	9,593	8,116	8,628	6,362	5,369	1,812	2,157	1,993
August	7,427	6,833	9,148	5,055	5,010	1,458	1,747	2,003
September	9,840	10,424	9,412	6,120	6,335	2,152	2,147	2,075
October	12,635	12,255	9,831	7,447	7,012	2,312	2,157	2,289
November	9,620	10,355	10,120	5,561	6,145	2,497	2,258	2,237
December	9,903	11,003	10,641	5,341	5,882	2,855	3,270	2,316
1977								
January	9,838	9,848	10,480	6,352	6,114	2,138	1,842	2,289
February	8,787	9,963	10,216	5,501	6,223	2,206	2,219	2,471
March	8,957	9,458	10,229	5,537	5,928	2,086	1,987	2,599
April	10,092	10,668	(NA)	6,365	6,271	2,640	3,251	(NA)
May	8,140	10,436		5,344	5,984	1,908	3,024	
June	9,450	(¹)		5,739	(¹)	2,077	(¹)	
July	8,331	(¹)		6,195	(¹)	1,249	(¹)	
August	8,748	(¹)		5,337	(¹)	1,861	(¹)	
September	(NA)			(NA)		(NA)		
October								
November								
December								

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 6.)

¹See "New Features and Changes for This Issue," page 3.

defense indicators

TABLE
2

Advance Indicators of Defense Activity--Continued

Year and month	623. Gross obligations incurred outside the Federal Government for national defense, Treasury		Defense Department military prime contract awards for work performed in the United States, DOD						
			625. Total			626. Aircraft		627. Missile and space systems	
	Seasonally adjusted*	Moving average of seasonally adjusted data--6-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--6-month*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975									
January	8,069	8,422	3,567	3,693	3,494	1,062	...	346	...
February	8,271	7,894	3,321	3,987	3,488	509	1,873	276	1,206
March	8,590	8,472	2,625	2,817	3,513	421	...	244	...
April	5,335	p8,863	2,914	4,122	3,720	316	...	377	...
May	12,426	p9,084	2,713	3,926	3,744	386	1,524	242	1,451
June	p10,487	p9,259	6,626	3,773	3,925	732	...	537	...
July	9,397	p9,176	4,376	3,842	3,969	810	...	661	...
August	9,321	p9,592	5,295	5,072	3,776	1,254	2,413	1,070	1,465
September	8,092	p9,137	3,179	3,080	3,600	469	...	379	...
October	7,830	8,479	3,174	2,961	3,493	817	...	463	...
November	9,697	8,492	2,508	2,872	3,420	373	1,770	498	1,316
December	6,537	8,467	2,870	3,130	3,074	483	...	426	...
1976									
January	9,476	8,870	3,288	3,407	3,612	546	...	341	...
February	9,168	9,235	2,529	2,993	3,716	356	2,744	278	1,234
March	10,511	9,142	5,356	6,309	3,832	2,064	...	243	...
April	10,022	p9,616	2,600	3,586	3,946	326	...	290	...
May	9,137	p9,410	2,563	3,565	3,751	576	2,694	213	1,375
June	p9,383	p9,100	6,843	3,817	3,863	1,562	...	602	...
July	8,238	p9,114	2,592	2,234	3,633	416	...	287	...
August	7,307	p9,557	3,969	3,665	4,025	914	2,011	422	845
September	10,597	p9,650	4,934	4,929	4,294	799	...	521	...
October	12,679	10,034	6,269	5,942	4,524	896	...	771	...
November	9,698	10,290	4,580	5,175	4,731	1,140	3,661	1,060	2,346
December	11,684	10,958	4,543	5,198	4,866	1,442	...	679	...
1977									
January	9,777	10,938	3,360	3,478	4,851	955	...	355	...
February	11,313	10,825	3,685	4,472	4,780	959	2,380	362	1,926
March	10,476	(NA)	4,325	4,843	4,809	680	...	610	...
April	12,000		4,041	5,513	(NA)	1,274	...	371	...
May	(NA)		3,778	5,351		952	(¹)	309	(¹)
June			3,349	(¹)		695		387	
July			r3,696	(¹)		1,280		354	
August			p3,750	(¹)		p494		p251	
September			(NA)			(NA)		(NA)	
October									
November									
December									

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See pages 6 and 7.)

¹See "New Features and Changes for This Issue," page 3.

Advance Indicators of Defense Activity--Continued

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD--Continued						
	628. Ships, not seasonally adjusted	629. Weapons and ammunition		630. Electronic and communications equipment		631. Combat vehicles	
		Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975							
January	325	125	...	414	...	21	...
February	251	160	537	331	1,404	66	288
March	11	217	...	535	...	52	...
April	621	147	...	313	...	23	...
May	94	128	577	587	1,305	86	191
June	858	672	...	696	...	161	...
July	250	52	...	394	...	126	...
August	814	126	545	470	1,410	70	259
September	439	95	...	430	...	90	...
October	80	128	...	439	...	67	...
November	114	66	375	445	1,280	14	172
December	211	146	...	332	...	62	...
1976							
January	310	76	...	263	...	48	...
February	124	101	348	305	1,110	26	238
March	1,213	148	...	442	...	61	...
April	306	158	...	348	...	32	...
May	65	135	447	381	1,204	63	415
June	346	450	...	735	...	512	...
July	506	52	...	207	...	4	...
August	91	90	1,112	506	1,478	150	242
September	396	418	...	664	...	119	...
October	861	108	...	410	...	252	...
November	153	121	453	710	1,778	47	683
December	178	173	...	566	...	204	...
1977							
January	283	90	...	427	...	74	...
February	478	177	427	436	1,470	74	568
March	483	131	...	473	...	152	...
April	322	193	...	615	...	25	...
May	273	225	(¹)	521	(¹)	71	(¹)
June	288	132	...	512	...	69	...
July	118	133	...	r460	...	39	...
August	p283	p199	...	p732	...	p65	...
September	(NA)	(NA)	...	(NA)	...	(NA)	...
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated.

¹See "New Features and Changes for This Issue," page 3.

defense indicators

TABLE

2

Advance Indicators of Defense Activity--Continued

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD--Continued							
	632. Other hard goods		633. Soft goods		634. Construction		635. Services	
	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975								
January	154	...	217	...	168	...	307	...
February	143	497	704	1,489	134	481	341	1,396
March	152	...	191	...	127	...	201	...
April	147	...	164	...	156	...	190	...
May	165	487	121	658	291	838	211	925
June	399	...	213	...	1,073	...	574	...
July	104	...	811	...	82	...	634	...
August	115	532	307	937	61	486	570	1,136
September	150	...	256	...	178	...	204	...
October	201	...	173	...	149	...	216	...
November	156	631	214	687	56	605	210	523
December	179	...	244	...	176	...	121	...
1976								
January	190	...	817	...	85	...	244	...
February	180	590	330	1,611	107	448	256	1,111
March	166	...	187	...	151	...	230	...
April	173	...	221	...	198	...	179	...
May	159	434	120	780	213	611	158	881
June	316	...	243	...	791	...	587	...
July	92	...	287	...	79	...	335	...
August	177	792	513	646	196	1,073	504	1,018
September	324	...	171	...	403	...	429	...
October	105	...	1,760	...	42	...	660	...
November	226	600	220	2,603	82	385	391	1,356
December	199	...	295	...	136	...	275	...
1977								
January	213	...	163	...	125	...	241	...
February	141	635	181	944	101	594	371	1,234
March	222	...	538	...	175	...	242	...
April	237	...	166	...	142	...	211	...
May	203	(¹)	156	(¹)	456	(¹)	220	(¹)
June	214	...	200	...	228	...	204	...
July	271	...	170	...	160	...	215	...
August	p247	...	p191	...	p531	...	p243	...
September	(NA)	...	(NA)	...	(NA)	...	(NA)	...
October								
November								
December								

NA=not available; p=preliminary; r=revised; e=estimated.

¹See "New Features and Changes for This Issue," page 3.

Advance Indicators of Defense Activity--Continued

Year and month	Defense Department military prime contract awards for work performed in the United States, DOD--Continued					640. Defense Department military prime contract awards for work outside the United States, DOD	
	636. Contracts under \$10,000		637. Educational and nonprofit institutions		638. Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), not seasonally adjusted	Not seasonally adjusted	Seasonally adjusted
	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted			
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975							
January	372	...	51	...	5	114	...
February	345	1,144	61	205	0	93	388
March	419	...	53	...	2	96	...
April	418	...	42	...	0	73	...
May	367	1,141	35	201	0	86	813
June	635	...	76	...	0	558	...
July	263	...	184	...	5	244	...
August	345	1,218	92	253	1	149	317
September	409	...	80	...	0	124	...
October	374	...	67	...	0	252	...
November	412	1,273	50	192	0	164	941
December	408	...	82	...	0	255	...
1976							
January	327	...	39	...	2	286	...
February	416	1,156	48	163	2	95	681
March	405	...	44	...	2	139	...
April	300	...	68	...	1	147	...
May	430	1,100	50	254	0	93	609
June	625	...	73	...	1	306	...
July	253	...	74	...	0	208	...
August	351	1,458	55	142	0	132	424
September	615	...	74	...	1	347	...
October	201	...	203	...	0	575	...
November	303	892	127	415	0	107	962
December	358	...	78	...	0	175	...
1977							
January	365	...	69	...	0	362	...
February	344	1,279	61	285	0	74	878
March	528	...	91	...	0	191	...
April	420	...	65	...	0	101	...
May	451	(¹) ...	41	(¹) ...	0	103	(¹) ...
June	384	...	36	...	0	157	...
July	r449	...	47	...	0	190	...
August	p464	...	p50	...	p0	p174	...
September	(NA)	...	(NA)	...	(NA)	(NA)	...
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated.

¹See "New Features and Changes for This Issue," page 3.

defense indicators

TABLE
2

Advance Indicators of Defense Activity--Continued

Year and month	Defense Department gross unpaid obligations outstanding, DOD						648. Manufacturers' new orders, defense products, Census		650. Manufacturers' new orders from the U.S. Government, aerospace industries, Census, seasonally adjusted*
	643. Total		644. Operations		645. Procurement				
	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted	Not seasonally adjusted	Seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data—6-month*	
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	
1975									
January	40,819	40,052	7,997	7,625	25,484	24,838	1,398	2,004	...
February	40,008	39,875	7,520	7,626	25,452	24,568	2,576	2,147	4,415
March	39,473	40,198	7,169	7,775	25,688	25,259	1,996	2,118	...
April	38,589	39,918	7,276	7,794	24,932	24,957	2,445	2,080	...
May	37,120	40,086	6,746	7,713	24,321	25,099	2,266	2,242	3,912
June	39,557	40,959	7,303	8,005	25,311	25,438	1,799	2,167	...
July	e41,470	e41,437	e8,733	e8,548	e25,167	e25,370	2,367	2,262	...
August	43,248	42,140	8,677	8,132	26,070	26,684	2,130	2,123	4,783
September	43,084	41,805	8,677	8,216	26,002	26,479	2,563	2,095	...
October	43,754	41,845	9,259	8,247	26,081	26,238	1,610	2,118	...
November	42,767	41,468	8,804	8,353	25,810	25,707	2,100	1,963	5,227
December	41,551	41,309	8,261	8,241	25,507	25,305	1,937	1,974	...
1976									
January	42,110	41,358	8,947	8,548	25,503	24,905	1,440	2,017	...
February	41,512	41,459	8,538	8,681	25,586	24,841	2,194	2,197	5,426
March	41,046	41,866	7,966	8,658	25,783	25,277	2,818	2,247	...
April	41,029	42,494	8,253	8,827	25,606	25,657	2,690	2,360	...
May	39,742	42,970	7,795	8,914	25,125	25,929	2,401	2,326	5,272
June	42,152	43,612	8,037	8,780	26,508	26,482	2,614	2,280	...
July	43,366	43,251	8,939	8,717	26,537	27,162	1,239	2,169	...
August	42,525	41,406	8,569	8,025	26,346	26,802	1,919	2,194	3,818
September	43,351	42,047	8,615	8,160	26,832	27,185	2,153	2,318	...
October	47,890	45,813	10,624	9,484	27,632	27,827	2,840	2,557	...
November	48,988	47,517	10,700	10,184	28,934	28,733	3,141	2,675	6,663
December	50,354	50,103	10,374	10,353	29,348	29,202	4,050	2,670	...
1977									
January	51,694	50,780	11,150	10,660	29,966	29,465	1,949	2,680	...
February	52,016	52,016	11,122	11,326	30,485	29,946	1,887	2,806	4,496
March	51,326	52,373	10,563	11,494	30,550	30,128	2,214	2,832	...
April	52,309	54,206	10,978	11,729	31,330	31,551	3,597	2,520	...
May	51,512	55,749	10,574	12,098	31,390	32,562	3,293	2,518	p6,420
June	51,549	53,308	10,320	11,254	31,449	31,449	2,182	r2,536	...
July	50,898	50,695	10,676	10,395	30,853	31,259	1,932	p2,482	...
August	50,133	48,815	9,792	9,169	30,791	31,292	r1,998		(NA)
September	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	p1,889		
October									
November									
December									

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See pages 7 and 8.)

Advance Indicators of Defense Activity--Continued

Year and month	653. Average weekly overtime hours, production workers, defense products industries, BLS			654. Accession rate, defense products industries, BLS			655. Layoff rate, defense products industries, BLS		
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--4-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--4-month*	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--4-month*
	(Hours)	(Hours)	(Hours)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)	(Per 100 employees)
1975									
January	2.4	2.5	2.6	1.4	1.6	1.6	1.2	1.1	1.0
February	2.4	2.5	2.5	1.3	1.6	1.6	1.3	1.2	1.2
March	2.3	2.5	2.5	1.3	1.6	1.7	2.1	1.9	1.4
April	2.1	2.4	2.4	1.9	2.1	1.6	1.4	1.3	1.4
May	2.0	2.3	2.4	1.3	1.3	1.5	1.3	1.3	1.5
June	2.5	2.4	2.4	1.7	1.0	1.4	1.3	1.4	1.2
July	2.2	2.5	2.4	1.6	1.3	1.2	0.8	1.0	1.2
August	2.6	2.6	2.5	1.6	1.2	1.2	1.2	1.3	1.2
September	2.8	2.5	2.6	1.7	1.3	1.2	1.0	1.2	1.2
October	2.7	2.6	2.6	1.4	1.2	1.2	1.0	1.1	1.1
November	2.7	2.5	2.5	1.0	1.3	1.4	0.8	0.7	0.9
December	2.9	2.5	2.6	0.8	1.6	1.4	0.6	0.6	0.8
1976									
January	2.5	2.6	2.6	1.3	1.4	1.5	1.1	1.0	0.8
February	2.5	2.6	2.6	1.3	1.6	1.6	0.8	0.7	0.8
March	2.4	2.5	2.4	1.5	1.7	1.5	0.8	0.7	0.7
April	1.7	2.0	2.4	1.2	1.4	1.6	0.6	0.5	0.6
May	2.3	2.6	2.4	1.6	1.6	1.6	0.6	0.6	0.6
June	2.5	2.5	2.4	2.1	1.5	1.4	0.6	0.7	0.6
July	2.4	2.7	2.6	1.6	1.3	1.5	0.7	0.8	0.7
August	2.7	2.7	2.6	2.0	1.6	1.5	0.6	0.7	0.8
September	2.6	2.3	2.6	1.9	1.5	1.5	0.6	0.8	0.8
October	2.8	2.7	2.6	1.8	1.6	1.6	0.8	0.8	0.7
November	2.8	2.5	2.6	1.6	1.9	1.7	0.5	0.5	0.6
December	3.2	2.8	2.7	0.9	1.7	1.9	0.3	0.4	0.6
1977									
January	2.7	2.8	2.8	2.2	2.4	2.0	0.6	0.5	0.4
February	2.8	2.9	2.8	1.8	2.1	2.1	0.5	0.4	0.5
March	2.5	2.7	2.8	2.1	2.3	2.2	0.9	0.7	0.5
April	2.6	3.0	2.9	2.0	2.2	2.2	0.4	0.3	0.5
May	2.9	3.1	3.0	2.3	2.3	2.2	0.5	0.5	0.4
June	3.0	3.0	3.0	2.8	2.2	2.1	0.3	0.3	0.4
July	2.8	3.0	p3.0	2.0	1.7	(NA)	0.6	0.7	(NA)
August	p3.1	p3.0	(NA)	(NA)	(NA)		(NA)	(NA)	
September	(NA)	(NA)							
October									
November									
December									

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 8.)

defense indicators

TABLE

3

Intermediate and Final Indicators of Defense Activity

Year and month	657. Output of defense and space equipment, FRB, seasonally adjusted*	659. Manufacturers' inventories, defense products, Census, seasonally adjusted*	661. Manufacturers' unfilled orders, defense products, Census, seasonally adjusted*	664. Manufacturers' unfilled orders from the U.S. Government, aerospace industries, Census, seasonally adjusted*	666. Defense Department progress payments outstanding, DOD, not seasonally adjusted*	670. Employment in defense products industries, total, BLS	
	(Index: 1987=100)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	Not seasonally adjusted	Seasonally adjusted*
(Thous.)							
1975							
January	82.1	5,487	27,221	...	...	1,178	1,175
February	79.9	5,565	27,835	...	...	1,141	1,141
March	79.7	5,639	27,823	20,907	9,609	1,137	1,142
April	80.2	5,750	28,238	...	...	1,121	1,128
May	80.9	5,890	28,604	...	...	1,131	1,140
June	81.6	6,051	28,459	21,230	10,464	1,123	1,127
July	81.0	6,207	28,920	...	...	1,110	1,117
August	80.6	6,252	29,007	...	...	1,100	1,108
September	81.2	6,399	29,706	20,906	11,008	1,104	1,100
October	78.5	6,456	29,237	...	...	1,097	1,090
November	77.3	6,549	29,264	...	...	1,089	1,077
December	77.7	6,568	29,210	21,776	11,257	1,088	1,075
1976							
January	80.5	6,488	28,449	...	...	1,084	1,081
February	80.1	6,523	28,438	...	...	1,075	1,076
March	79.5	6,634	29,069	22,598	9,848	1,071	1,077
April	78.4	6,720	29,550	...	...	1,066	1,072
May	78.1	6,824	29,727	...	...	1,061	1,070
June	77.5	6,774	30,294	22,883	12,041	1,060	1,064
July	77.5	6,846	29,422	...	...	1,043	1,050
August	78.5	6,804	29,153	...	...	1,053	1,060
September	77.6	6,798	29,188	22,020	11,881	1,062	1,059
October	78.0	6,847	29,800	...	...	1,062	1,056
November	77.6	6,847	30,698	...	...	1,066	1,054
December	77.2	6,577	32,231	21,666	8,465	1,070	1,060
1977							
January	78.0	6,609	31,536	...	...	1,067	1,062
February	78.5	6,625	30,809	...	...	1,067	1,069
March	78.5	6,517	30,411	22,962	8,521	1,061	1,067
April	79.9	6,602	31,512	...	...	1,071	1,077
May	80.0	6,637	32,226	...	...	1,071	1,079
June	80.3	6,874	31,857	p24,308	8,735	1,083	1,086
July	r80.5	6,936	31,212	...	...	r1,084	r1,092
August	r81.1	6,926	r30,707	...	...	pl,077	pl,085
September	p81.4	(NA)	p30,168	(NA)	(NA)	(NA)	(NA)
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See pages 9 and 10.)

Intermediate and Final Indicators of Defense Activity--Continued

TABLE
3

Year and month	671. Employment in defense products industries, production workers, BLS		673. Index of aggregate weekly hours, defense products industries, BLS		675. Index of aggregate weekly payrolls, production workers, defense products industries, BLS	
	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted*	Not seasonally adjusted	Seasonally adjusted*
	(Thous.)	(Thous.)	(1967=100)	(1967=100)	(1967=100)	(1967=100)
1975						
January	618	615	69.2	69.2	102.8	102.6
February	589	589	67.0	67.0	98.6	98.4
March	585	588	66.8	67.0	99.1	99.4
April	570	574	66.1	66.8	97.6	99.5
May	581	588	66.5	66.8	100.2	101.3
June	573	577	66.4	66.6	101.2	102.3
July	564	570	65.0	66.1	97.9	101.7
August	555	563	64.9	65.6	98.3	101.0
September	558	556	65.5	65.1	102.0	101.2
October	554	549	64.9	64.5	101.5	100.4
November	549	540	64.6	63.5	101.8	98.7
December	549	538	65.0	63.8	104.9	99.8
1976						
January	545	542	64.1	64.1	101.3	101.1
February	540	540	63.5	63.5	100.7	100.4
March	537	529	63.3	63.6	100.8	101.1
April	533	537	62.0	62.7	96.1	99.3
May	530	536	62.6	63.0	99.2	100.0
June	529	533	62.6	62.8	99.4	100.2
July	510	516	61.2	62.2	96.0	99.8
August	520	528	62.0	62.7	99.2	101.8
September	529	528	62.4	62.0	101.9	101.1
October	529	525	62.4	62.0	104.0	102.6
November	532	523	63.5	62.5	106.5	103.4
December	533	524	64.1	62.7	109.2	103.8
1977						
January	533	529	63.0	62.8	106.4	105.5
February	531	531	63.6	63.7	108.5	108.4
March	525	528	63.3	63.6	107.4	107.8
April	533	538	63.5	64.5	109.2	113.1
May	534	539	63.8	64.1	110.3	111.2
June	541	543	64.6	64.6	112.7	113.5
July	r539	r546	r64.0	r65.1	r110.9	r115.3
August	p538	p547	p64.0	p64.6	p112.3	p115.3
September	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
October						
November						
December						

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 10.)

defense indicators

TABLE

3

Intermediate and Final Indicators of Defense Activity--Continued

Year and month	Defense Department personnel, DOD		Defense Department net outlays, DOD				
	677. Military, active duty, not seasonally adjusted*	678. Civilian, direct hire employment, not seasonally adjusted*	680. Total, military functions and military assistance			681. Operations	
			Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--6-month*	Not seasonally adjusted	Seasonally adjusted
	(Thous.)	(Thous.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975							
January	2,145	1,038	7,051	6,766	7,312	4,775	4,648
February	2,146	1,036	7,258	7,590	7,284	4,727	4,924
March	2,137	1,034	7,244	7,190	7,258	4,736	4,831
April	2,127	1,034	7,190	6,958	7,056	4,960	4,856
May	2,124	1,035	7,780	7,494	7,308	4,909	4,941
June	2,128	1,042	7,476	6,336	7,475	4,954	4,747
July	2,129	1,052	7,124	8,278	7,423	4,918	4,977
August	2,111	1,038	7,961	8,594	7,552	5,081	5,029
September	2,105	1,030	6,631	6,880	7,566	4,810	5,016
October	2,097	1,031	7,913	7,732	7,788	5,260	5,131
November	2,099	1,029	7,203	7,574	7,515	4,997	4,988
December	2,084	1,028	7,695	7,672	7,251	5,078	5,067
1976							
January	2,092	1,023	6,649	6,636	7,326	4,887	4,940
February	2,093	1,019	6,962	7,011	7,322	4,848	4,879
March	2,090	1,016	7,642	7,334	7,259	5,026	4,995
April	2,087	1,011	7,872	7,703	7,068	5,297	5,160
May	2,081	1,010	7,042	7,200	7,406	4,889	5,023
June	2,082	1,010	7,843	6,525	7,486	5,170	4,925
July	2,087	1,014	7,433	8,663	7,563	5,050	5,135
August	2,085	1,006	7,163	7,493	7,546	5,059	5,054
September	2,084	997	7,513	7,794	7,562	5,457	5,543
October	2,086	995	7,478	7,600	7,657	4,984	5,015
November	2,082	996	7,301	7,294	7,477	5,277	5,220
December	2,072	995	7,422	7,096	7,614	5,356	5,190
1977							
January	2,077	994	6,979	7,586	7,649	5,262	5,436
February	2,078	995	8,004	8,312	7,697	5,202	5,430
March	2,075	995	8,454	8,006	7,911	5,529	5,501
April	2,071	995	7,850	7,889	7,896	5,487	5,443
May	2,070	997	8,412	8,575	8,125	5,269	5,349
June	2,075	1,009	8,266	7,005	r8,135	5,540	5,271
July	2,079	1,008	7,879	8,964	p8,401	5,389	5,449
August	2,073	998	r8,244	r8,370		r5,505	r5,402
September	p2,075	(NA)	p9,448	p9,602		p5,873	p5,932
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See pages 10 and 11.)

TABLE

3

Intermediate and Final Indicators of Defense Activity--Continued

Year and month	Defense Department net outlays, DOD--Continued			883. Budget outlays for the national defense function, Treasury		885. Defense Department personnel compensation, DOD	
	882. Procurement			Seasonally adjusted*	Moving average of seasonally adjusted data--8-month*	Not seasonally adjusted	Seasonally adjusted*
	Not seasonally adjusted	Seasonally adjusted*	Moving average of seasonally adjusted data--8-month*				
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1975							
January	1,427	1,428	1,460	7,039	7,554	2,913	2,768
February	1,351	1,444	1,429	7,896	7,526	2,808	2,869
March	1,500	1,440	1,414	7,385	7,536	2,812	2,850
April	1,220	1,194	1,354	7,297	7,342	2,867	2,870
May	1,467	1,406	1,328	7,788	7,564	2,870	2,877
June	1,409	1,215	1,360	6,649	7,747	2,823	2,887
July	1,225	1,268	1,322	8,367	7,706	2,941	2,895
August	1,559	1,634	1,361	8,996	7,818	2,873	2,910
September	1,191	1,217	1,330	7,140	7,836	2,936	2,961
October	1,500	1,425	1,365	7,971	8,079	3,008	2,954
November	1,081	1,220	1,384	7,896	7,830	2,866	2,893
December	1,319	1,427	1,328	8,103	7,352	2,916	2,904
1976							
January	1,363	1,384	1,305	6,874	7,411	3,018	2,907
February	1,227	1,293	1,382	6,126	7,380	2,820	2,804
March	1,195	1,082	1,361	7,497	7,286	2,887	2,866
April	1,792	1,884	1,330	7,784	7,068	2,845	2,861
May	1,092	1,095	1,321	7,334	7,376	2,851	2,889
June	1,418	1,244	1,281	6,795	7,589	3,007	3,036
July	1,347	1,326	1,338	8,717	7,656	2,963	2,960
August	1,063	1,055	1,241	7,409	7,649	2,962	2,962
September	1,356	1,423	1,328	7,896	7,653	2,978	2,997
October	1,337	1,303	1,418	7,743	7,776	3,026	3,037
November	1,502	1,617	1,462	7,360	7,610	3,020	2,978
December	1,745	1,781	1,561	7,530	7,764	3,097	3,088
1977							
January	1,524	1,594	1,554	7,723	7,802	3,034	2,951
February	1,570	1,646	1,596	8,331	7,845	2,886	2,951
March	1,511	1,381	1,552	8,125	8,060	3,137	3,118
April	1,558	1,555	1,496	8,000	7,996	3,008	3,063
May	1,324	1,358	1,526	8,650	8,289	3,084	3,087
June	1,643	1,442	1,509	7,146	8,075	3,112	3,143
July	1,572	1,772	p1,511	9,483	(NA)	r3,054	r3,082
August	1,521	1,547		7,047		p3,055	p3,019
September	p1,371	p1,390		(NA)		(NA)	(NA)
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 11.)

defense indicators

TABLE

3

Intermediate and Final Indicators of Defense Activity--Continued

Year and month	888. Manufacturers' shipments, defense products, Census		889. Manufacturers' shipments to the U.S. Government, aerospace industries, Census, seasonally adjusted*	891. Ratio, manufacturers' unfilled orders to shipments, defense products, Census		893. Ratio, manufacturers' inventories to shipments, defense products, Census	
	Seasonally adjusted*	Moving average of seasonally adjusted data--5-month*		Seasonally adjusted*	Moving average of seasonally adjusted data--5-month*	Seasonally adjusted*	Moving average of seasonally adjusted data--5-month*
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Ratio)	(Ratio)	(Ratio)	(Ratio)
1975							
January	1,923	1,902	...	14.2	14.6	2.9	2.9
February	1,982	1,950	4,105	14.0	14.3	2.8	2.9
March	1,989	1,965	...	14.0	14.2	2.8	2.9
April	2,030	1,969	...	13.9	14.3	2.8	2.9
May	1,901	1,954	4,104	15.0	14.5	3.1	3.0
June	1,943	1,965	...	14.6	14.6	3.1	3.1
July	1,906	1,931	...	15.2	15.0	3.3	3.2
August	2,043	1,967	4,847	14.2	14.8	3.1	3.2
September	1,864	1,993	...	15.9	14.7	3.4	3.2
October	2,079	2,010	...	14.1	14.6	3.1	3.2
November	2,073	2,042	4,283	14.1	14.3	3.2	3.2
December	1,991	2,110	...	14.7	13.7	3.3	3.1
1976							
January	2,201	2,132	...	12.9	13.6	2.9	3.1
February	2,206	2,159	4,564	12.9	13.4	3.0	3.0
March	2,187	2,206	...	13.3	13.2	3.0	3.0
April	2,210	2,175	...	13.4	13.6	3.0	3.1
May	2,224	2,156	5,056	13.4	13.8	3.1	3.1
June	2,047	2,156	...	14.8	13.8	3.3	3.1
July	2,111	2,137	...	13.9	13.8	3.2	3.2
August	2,188	2,138	4,528	13.3	13.8	3.1	3.2
September	2,117	2,178	...	13.8	13.6	3.2	3.1
October	2,228	2,258	...	13.4	13.4	3.1	3.0
November	2,244	2,350	4,970	13.7	13.1	3.1	2.9
December	2,515	2,450	...	12.8	12.7	2.6	2.8
1977							
January	2,647	2,526	...	11.9	12.4	2.5	2.6
February	2,615	2,577	5,277	11.8	12.1	2.5	2.5
March	2,611	2,589	...	11.6	12.1	2.5	2.5
April	2,496	2,570	...	12.6	12.2	2.6	2.6
May	2,578	2,563	p5,054	12.5	12.3	2.6	2.6
June	2,551	r2,541	...	12.5	r12.4	2.7	2.7
July	2,578	p2,527	...	12.1	p12.4	2.7	(NA)
August	r2,501		(NA)	r12.3		2.8	
September	p2,426			p12.4		(NA)	
October							
November							
December							

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 12.)

TABLE

4

Defense-Related Balance of Payments Components

Year and quarter	546. Transfers under U.S. military agency sales contracts (exports), BEA ¹		547. Direct defense expenditures (imports), BEA, not seasonally adjusted*	686. U.S. Government cash receipts associated with military sales contracts, BEA ²	
	Not seasonally adjusted	Seasonally adjusted*		Not seasonally* adjusted	Seasonally adjusted*
	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)	(Mil. dol.)
1973					
First quarter.....	332	347	1,169	520	566
Second quarter.....	504	455	1,231	544	552
Third quarter.....	489	531	1,067	610	617
Fourth quarter.....	1,017	1,009	1,162	616	555
1974					
First quarter.....	644	638	1,153	497	546
Second quarter.....	738	683	1,298	642	650
Third quarter.....	720	781	1,265	995	990
Fourth quarter.....	850	850	1,319	808	756
1975					
First quarter.....	946	924	1,317	1,050	(NA)
Second quarter.....	888	874	1,185	1,013	
Third quarter.....	902	957	1,096	1,148	
Fourth quarter.....	1,183	1,164	1,198	1,376	
1976					
First quarter.....	1,132	1,095	1,160	2,246	
Second quarter.....	1,193	1,189	1,228	1,858	
Third quarter.....	1,403	1,472	1,237	2,041	
Fourth quarter.....	1,486	1,457	1,222	2,068	
1977					
First quarter.....	1,912	1,845	1,329	1,992	
Second quarter.....	p1,854	p1,867	p1,403	p1,885	
Third quarter.....					
Fourth quarter.....					

NA=not available; p=preliminary; r=revised; e=estimated. *Indicates series shown in charts. (See page 13.)

¹Includes deliveries for which Israel has been released from its contractual liability to pay.²Excludes funds made available to release Israel from its contractual liability to pay for defense articles and services purchased through military sales contracts. Quarterly expenditures for such purpose under Public Law 93-199 and subsequent legislation amounted to (in millions): 1974, I, \$623; II, \$223; IV, \$91; 1975, I, \$187; II, \$124; III, \$83; IV, \$242; 1976, I, \$16; II, \$100; III, \$743; IV, \$5; 1977, I, \$138; II, \$245.

Appendix A. SEASONAL ADJUSTMENT FACTORS

Series title	1977											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
MONTHLY SERIES												
Defense Department gross obligations incurred:												
617. Total ¹	99.9	88.2	94.7	94.6	78.0	135.2	112.5	108.5	99.8	105.3	92.4	90.0
619. Operations ¹	103.9	88.4	93.4	101.5	89.3	117.8	116.5	101.2	96.9	108.2	90.3	90.8
621. Procurement	116.1	99.4	105.0	81.2	63.1	161.4	84.7	82.6	100.7	106.8	111.2	87.3
623. Gross obligations incurred outside the Federal Government for national defense ¹	101.3	84.9	99.6	94.1	82.8	126.3	117.7	110.0	96.5	95.2	103.3	90.4
625. Defense Department military prime contract awards for work performed in the United States	96.6	82.4	89.3	73.3	70.6	177.9	115.5	107.1	101.4	111.0	86.7	87.4
Defense Department gross unpaid obligations outstanding: ²												
643. Total	101.8	100.0	98.0	96.5	92.4	96.7	100.4	102.7	103.1	104.5	103.1	100.5
644. Operations	104.6	98.2	91.9	93.6	87.4	91.7	102.7	106.8	105.6	111.9	104.9	100.2
645. Procurement	101.7	101.8	101.4	99.3	96.4	100.0	98.7	98.4	99.6	100.8	101.3	100.5
648. Manufacturers' new orders, defense products ³	108.0	93.7	97.3	82.5	65.3	117.1	186.8	94.1	102.5	106.9	83.8	101.0
653. Average weekly overtime hours, production workers, defense products industries ⁴	-1	-1	-2	-4	-2	0	-2	1	2	2	3	4
654. Accession rate, defense products industries ⁴	-2	-3	-2	-2	0	6	3	4	2	2	-4	-8
655. Layoff rate, defense products industries ⁴	1	1	2	1	0	0	-1	-1	-1	0	0	-1
657. Output of defense and space equipment ⁵	100.3	100.3	100.4	99.1	99.6	100.3	98.5	98.2	99.6	100.0	101.0	102.3
659. Manufacturers' inventories, defense products ⁵	98.5	100.1	101.1	100.7	99.8	100.4	100.1	100.3	100.3	100.3	100.9	100.4
661. Manufacturers' unfilled orders, defense products ⁵	101.2	100.9	100.6	99.1	96.2	97.4	101.4	101.2	100.9	101.5	100.0	99.9
Employment in defense products industries:												
670. Total	100.5	99.8	99.5	99.4	99.3	99.7	99.2	99.3	100.4	100.6	101.0	100.9
671. Production workers	100.8	99.9	99.5	99.2	99.0	99.6	98.7	98.5	100.4	100.9	101.6	101.7
673. Index of aggregate weekly hours, defense products industries	100.3	99.9	99.6	98.5	99.6	99.9	98.3	99.0	100.6	100.6	101.5	102.1
675. Index of aggregate weekly payrolls, production workers, defense products industries	100.9	100.1	99.7	96.6	99.2	99.3	96.2	97.4	100.7	101.4	103.0	105.2
Defense Department net outlays:												
680. Total, military functions and military assistance ¹	92.0	96.3	105.6	99.5	98.1	118.0	87.9	98.5	98.4	97.9	103.0	102.8
681. Operations ¹	96.8	95.8	100.5	100.8	98.5	105.1	98.9	101.9	99.0	97.0	103.3	99.5
682. Procurement ¹	95.6	95.4	109.4	100.2	97.5	113.9	88.7	98.3	98.6	100.8	93.2	107.5
683. Budget outlays for the national defense function ¹	91.7	97.6	105.5	99.7	98.9	117.6	84.4	100.5	98.9	97.5	103.1	103.1
685. Defense Department personnel compensation ¹	102.8	97.8	100.6	98.2	99.9	99.0	99.1	101.2	99.1	99.7	101.6	100.3
689. Manufacturers' shipments, defense products ³	87.6	97.6	100.4	98.5	100.5	105.4	94.8	97.4	106.1	101.4	96.3	103.8
QUARTERLY SERIES												
	IQ			IIQ			IIIQ			IVQ		
200. Gross national product ³	95.9			99.9			98.9			105.1		
264. Fed. Govt. purchases of goods and services, national defense ³	98.3			102.8			97.7			101.4		
546. Transfers under U.S. military agency sales contracts—exports ³	37			4			-69			29		
Defense Department military prime contract awards:												
626. Aircraft	109.0			90.1			106.3			95.0		
627. Missile and space systems	68.9			80.7			146.2			105.3		
629. Weapons and ammunition	93.2			167.3			50.5			88.8		
630. Electronic and communications equipment	90.9			121.2			93.8			94.8		
631. Combat vehicles	52.8			164.5			108.3			73.6		
632. Other hard goods	90.7			146.1			75.1			88.3		
633. Soft goods	93.4			72.2			146.6			87.4		
634. Construction	67.5			197.2			67.9			67.5		
635. Services	69.2			103.6			130.0			97.8		
636. Under \$10,000	96.7			122.8			84.0			96.6		
637. Educational and nonprofit institutions	77.6			76.0			149.3			98.2		
640. Outside U.S.	71.4			92.3			147.6			89.1		
Aerospace industries:												
650. Manufacturers' new orders from the U.S. Government	90.5			82.7			122.8			104.4		
664. Manufacturers' unfilled orders from the U.S. Government	101.3			96.2			100.3			102.1		
689. Manufacturers' shipments to the U.S. Government	93.8			102.6			101.0			102.6		

NOTE: The seasonal adjustment factors presented in this table were computed using the techniques described in the Bureau of the Census Technical Paper No. 15, *The X-11 Variant of the Census Method II Seasonal Adjustment Program*.

Monthly data for Defense Department military prime contract awards by commodity category (series 626 to 640) have not been adjusted for seasonal variation. The series on direct defense expenditures—imports (series 547), Defense Department progress payments outstanding (series 666), and Defense Department personnel (series 677 and 678) contain no measurable seasonal variation.

¹ Factors are products of seasonal and trading-day factors.

² Prior to 1972, data for gross unpaid obligations outstanding are not available for a number

of months but these gaps were filled with averages of preceding and following months for purposes of estimating seasonal variation.

³ These series have been adjusted by the source agencies. The factors shown here are implicit seasonal factors for the calendar year 1976 and are derived by dividing the seasonally unadjusted data by the seasonally adjusted data.

⁴ These series have been seasonally adjusted using the additive version of the seasonal adjustment program. Seasonally adjusted data are derived by subtracting the adjustment factor from the unadjusted data. Seasonally adjusted data for other series are derived by dividing the seasonal factors into the unadjusted data.

⁵ This series is the total of component series which have been adjusted separately by the source agency. The factors shown here are implicit seasonal factors for the calendar year 1976 and are derived by subtracting the seasonally adjusted data from the seasonally unadjusted data.

Appendix B. AVERAGE CHANGES AND RELATED MEASURES OF VARIABILITY

Part 1. Monthly Series

Series title	Period covered	\bar{O}	\bar{CI}	\bar{T}	\bar{C}	$\bar{I/C}$	MCD	Average duration of run (ADR)	
								CI	MCD
Defense Department gross obligations incurred:									
617. Total	Jan. '57-Jan. '76 ...	18.28	6.98	6.89	0.72	9.53	6	1.53	2.30
619. Operations	July '59-Jan. '76 ...	8.98	2.77	2.66	.65	4.09	4	1.69	3.00
621. Procurement	Jan. '57-Jan. '76 ...	44.28	22.39	22.27	1.54	14.44	6	1.46	2.08
623. Gross obligations incurred outside the Federal Government for national defense	July '63-Sept. '75 ..	14.17	7.92	7.82	.73	10.72	6	1.52	2.61
625. Defense Department military prime contract awards for work performed in the United States, total	Jan. '57-Jan. '76 ...	32.78	15.55	15.41	1.35	11.42	6	1.42	2.05
Defense Department gross unpaid obligations outstanding:									
643. Total	Jan. '57-Jan. '76 ...	2.13	1.32	.95	.88	1.08	2	2.65	3.98
644. Operations	Jan. '67-Jan. '76 ...	5.59	2.68	2.37	1.13	2.10	3	1.96	5.05
645. Procurement	Jan. '67-Jan. '76 ...	2.19	1.52	1.07	.94	1.14	2	2.08	4.12
Manufacturers' new orders:									
647. Defense products industries	Jan. '57-Mar. '72 ...	(NA)	15.11	14.89	.97	15.32	6	1.58	2.33
648. Defense products	Feb. '68-Jan. '76 ...	(NA)	21.50	21.43	1.47	14.59	6	1.56	1.80
*653. Average weekly overtime hours, production workers, defense products industries (hours)	Jan. '58-Jan. '76 ...	.22	.11	.11	.03	3.14	4	2.50	3.70
*654. Accasion rate, defense products industries (per 100 employees)	Jan. '58-Jan. '76 ...	.38	.16	.15	.05	3.12	4	2.16	4.18
*655. Layoff rate, defense products industries (per 100 employees)	Jan. '58-Jan. '76 ...	.17	.14	.13	.04	3.14	4	1.93	4.18
657. Output of defense and space equipment	Jan. '57-Jan. '76 ...	(NA)	.96	.50	.75	.67	1	3.40	3.40
Manufacturers' inventories:									
658. Defense products industries	Jan. '57-Mar. '72 ...	(NA)	1.04	.52	.85	.62	1	2.80	2.80
659. Defense products	Jan. '68-Jan. '76 ...	(NA)	1.75	1.13	1.29	.88	1	3.10	3.10
Manufacturers' unfilled orders:									
660. Defense products industries	Jan. '57-Mar. '72 ...	(NA)	1.23	.90	.83	1.09	2	2.76	3.42
661. Defense products	Jan. '68-Jan. '76 ...	(NA)	1.51	1.18	.93	1.27	2	2.04	4.13
Employment in defense products industries:									
670. Total	Jan. '58-Jan. '76 ...	.76	.70	.29	.59	.50	1	4.91	4.91
671. Production workers	Jan. '58-Jan. '76 ...	1.08	.93	.51	.70	.73	1	3.72	3.72
673. Index of aggregate weekly hours, defense products industries	Jan. '58-Jan. '76 ...	.95	.76	.39	.60	.65	1	4.00	4.00
675. Index of aggregate weekly payrolls, production workers, defense products industries	Jan. '58-Jan. '76 ...	1.72	1.14	.75	.78	.96	1	2.92	2.92
Defense Department personnel:									
677. Military, active duty (U)	Jan. '57-Jan. '76 ...	.62	(NA)	.27	.55	.48	1	3.86	3.86
678. Civilian, direct hire employment (U)	Jan. '57-Jan. '76 ...	.55	(NA)	.34	.42	.81	1	4.30	4.30
Defense Department net outlays:									
680. Total, military functions and military assistance	Jan. '57-Jan. '76 ...	8.89	4.31	4.19	.77	5.42	6	1.70	3.10
681. Operations	July '59-Jan. '76 ...	7.07	3.62	3.41	.73	4.69	5	1.58	2.34
682. Procurement	Jan. '57-Jan. '76 ...	15.10	11.77	11.65	1.59	7.32	6	1.57	2.90
683. Budget outlays for the national defense function	Jan. '57-Jan. '76 ...	8.87	4.27	4.18	.73	5.73	6	1.58	2.97
685. Defense Department personnel compensation	Jan. '67-Jan. '76 ...	2.70	1.33	1.13	.49	2.32	4	2.57	4.38
Manufacturers' shipments:									
687. Defense products industries	Jan. '57-Mar. '72 ...	(NA)	2.67	2.49	.87	2.85	3	1.64	3.40
688. Defense products	Jan. '68-Jan. '76 ...	(NA)	4.40	4.34	.98	4.41	5	1.57	2.71
Ratio, manufacturers' unfilled orders to shipments:									
690. Defense products industries	Jan. '57-Mar. '72 ...	(NA)	2.95	2.71	.96	2.82	4	1.90	3.81
691. Defense products	Jan. '68-Jan. '76 ...	(NA)	4.93	4.81	1.01	4.77	5	1.69	2.85
Ratio, manufacturers' inventories to shipments:									
692. Defense products industries	Jan. '57-Mar. '72 ...	(NA)	2.84	2.90	.72	4.01	5	2.46	5.74
693. Defense products	Jan. '68-Jan. '76 ...	(NA)	5.29	5.18	1.13	4.57	5	1.96	3.07

NA = not available.

*Measures for these series are based on actual changes rather than percent changes (see definition below). (U) indicates measures are based on unadjusted data.

BRIEF DEFINITIONS OF MEASURES SHOWN IN PART 1

The measures in this appendix provide a historical perspective for interpreting current changes in each series. They are derived using the Census X-11 seasonal adjustment program. Brief definitions of the measures are given below; more complete definitions appear in *Electronic Computers and Business Indicators* by Julius Shiskin, issued as Occasional Paper 57 by the National Bureau of Economic Research, 1957 (reprinted from *Journal of Business*, October 1957).

" \bar{O} " is the average month-to-month percent change, without regard to sign, in the original unadjusted series. (See final paragraph below for exceptions to these definitions.)

" \bar{CI} " is the same for the seasonally adjusted series.

" \bar{C} " is the same for the short-term trend, which is a smooth, flexible moving average of the seasonally adjusted series.

" \bar{T} " is the same for the irregular component, which is obtained by dividing the seasonally adjusted series by the short-term trend.

" $\bar{I/C}$ " measures the relative smoothness (small values) or irregularity (large values) of the seasonally adjusted series. It is the ratio of the average monthly percent change (without regard to sign) in the irregular component to the average monthly percent change (without regard to sign) in the short-term trend.

"MCD" (months for cyclical dominance) estimates the number of months required for the short-term trend to dominate the irregular component. Average percent changes are computed for spans of from 1 to 12 months for both the irregular component and the short-term trend. MCD is the shortest span of months for which the average percent change (without regard to sign) in the short-term trend is greater than that in the irregular component. All MCD's greater than "6" are shown as "6".

Appendix B. AVERAGE CHANGES AND RELATED MEASURES OF VARIABILITY—Continued

"Average Duration of Run" (ADR) is another measure of smoothness and is equal to the average number of consecutive monthly changes in the same direction in any series of observations. When there is no change between two observations, a change in the same direction as the preceding change is assumed. The ADR is shown for the seasonally adjusted series (CI) and the MCD curve, which is a moving average (with the number of terms equal to MCD) of the seasonally adjusted series. A comparison of these measures with the expected ADR of a random series indicates whether the changes approximate those of a random series. In a random series, the expected ADR is 1.5 and the actual values fall between 1.36 and 1.75 about 95 percent of the time. For a moving average of a random series, the expected ADR is 2.

Measures for series identified with an asterisk (*) are computed by an additive method. This method is used for series with zero or negative data, series which could approach zero, and series expressed in percent. In this method, the measures are defined the same as above except for two differences: (1) the measures are based on actual month-to-month changes (rather than percent changes) and (2) the irregular component is obtained by subtracting the short-term trend from the seasonally adjusted series. The average changes shown above for the components of such a series are in the same unit of measure as the series itself. The unit is indicated in the series title.

Part 2. Quarterly Series

Series title	Period covered	\bar{O}	\bar{CI}	\bar{T}	\bar{C}	$\bar{I/C}$	QCD	Average duration of run (ADR)	
								CI	QCD
200. Gross national product.....	IQ '57-IVQ '75....	(NA)	1.84	0.35	1.76	0.20	1	8.33	8.33
264. Federal Government purchases of goods and services, national defense ...	IQ '57-IVQ '75....	(NA)	1.95	.79	1.70	.46	1	3.26	3.26
*546. Transfers under U.S. military agency sales contracts—exports (mil. dol.) ..	IQ '60-IVQ '75....	79.21	65.13	48.28	34.19	1.41	2	1.70	2.30
*547. Direct defense expenditures—imports (mil. dol.) (U).....	IQ '60-IVQ '75....	42.32	(NA)	36.13	24.65	1.47	2	1.66	2.82
*613. National defense purchases as a percent of GNP (percent).....	IQ '57-IVQ '75....	(NA)	.16	.07	.15	.46	1	5.36	5.36
650. Manufacturers' new orders from the U.S. Government, aerospace industries.....	IQ '61-IVQ '75....	24.44	17.96	14.82	5.85	2.53	3	1.44	1.73
664. Manufacturers' unfilled orders from the U.S. Government, aerospace industries.....	IQ '61-IVQ '75....	4.55	3.91	2.44	2.68	.91	1	2.27	2.27
666. Defense Department progress payments outstanding (U).....	IQ '57-IVQ '75....	4.80	(NA)	2.06	4.35	.47	1	2.78	2.78
689. Manufacturers' shipments to the U.S. Government, aerospace industries ..	IQ '61-IVQ '75....	7.04	4.27	3.43	2.11	1.62	2	1.84	2.76
*696. U.S. Government cash receipts associated with military sales contracts (million dollars).....	IQ '60-IVQ '75....	107.60	83.62	61.48	45.74	1.34	2	1.57	2.82

NA = not available.

*Measures for these series are based on actual changes rather than percent changes (see definition below). (U) indicates measures are based on unadjusted data.

BRIEF DEFINITIONS OF MEASURES SHOWN IN PART 2

These measures are defined the same as those in part 1 except that they are based on quarter-to-quarter percent changes. For example, CI is the average quarter-to-quarter percent change (without regard to sign) in the seasonally adjusted series.

In deriving "QCD" (quarters for cyclical dominance), average percent changes are computed for spans of from one to four quarters for the irregular component and the short-term trend. QCD is the shortest span of quarters for

which the average percent change (without regard to sign) in the short-term trend is greater than that in the irregular component. All QCD's greater than "3" are shown as "4". The "Average Duration of Run" (ADR) measures are also expressed in quarters.

As in part 1, measures for series identified with an asterisk (*) are computed by an additive method. This method is the same as that used for the monthly series except for the use of quarterly data rather than monthly.

Appendix C. HISTORICAL DATA

This appendix provides historical data (back to 1945 if available) for selected Defense Indicators series. Data are shown for series which (a) have recently been added to the report, (b) have recently been revised, or (c) have not been shown here for a long time. By keeping these tables, the user can acquire a complete set of historical data. Each time a series is included in this appendix, it is footnoted to indicate the extent of any revisions since it was last shown. See the "Alphabetical Index—Series Finding Guide" for the latest issue in which historical data

were published for each series. Current figures are shown in the basic data tables each month and may be used to update these historical tables.

Official source agency annual figures are shown if available. Such figures may differ slightly from those computed from the monthly or quarterly data appearing in the tables. When both seasonally adjusted and unadjusted data are shown for a series, annual figures are not included for the unadjusted data. Quarterly and annual data are not included for moving averages.

Year	Quarterly				Annual	Year	Quarterly				Annual		
	I Q	II Q	III Q	IV Q			I Q	II Q	III Q	IV Q			
200. GROSS NATIONAL PRODUCT IN CURRENT DOLLARS (ANNUAL RATE, BILLIONS OF DOLLARS)						AVERAGE	200-B. DIFFERENCE FROM PRECEDING PERIOD IN GNP, CURRENT DOLLARS (ANNUAL RATE, BILLIONS OF DOLLARS)						DIFFERENCE ¹
1945.....	...	...	...	...	...	1945.....	...	...	...	...	...	...
1946.....	197.4	205.0	216.3	220.4	208.4	1946.....	...	7.6	10.3	5.1	...	...
1947.....	224.9	239.1	233.3	243.6	232.0	1947.....	...	...	...	4.3	39.3	...	
1948.....	249.6	257.1	264.0	265.5	259.1	1948.....	...	6.9	7.5	6.9	1.5	26.3	
1949.....	260.1	258.6	258.6	256.5	258.0	1949.....	...	-3.5	2.0	-2.1	-1.1	...	
1950.....	270.9	284.5	295.9	298.2	286.2	1950.....	...	15.9	9.5	17.6	11.4	26.2	
1951.....	319.9	327.7	334.4	338.5	330.2	1951.....	...	14.0	7.0	6.7	4.1	...	
1952.....	341.1	341.3	347.0	359.2	347.2	1952.....	...	2.6	0.2	5.7	13.2	17.0	
1953.....	365.4	360.0	367.0	362.6	366.1	1953.....	...	6.1	3.4	-1.0	-1.2	10.9	
1954.....	362.0	361.0	356.2	375.0	364.3	1954.....	...	-0.6	-0.2	4.4	0.8	6.2	
1955.....	387.5	395.4	404.0	410.2	399.3	1955.....	...	12.5	7.9	8.6	-2.0	33.0	
1956.....	411.9	417.4	422.4	430.9	420.7	1956.....	...	1.7	5.5	5.0	9.5	31.4	
1957.....	436.9	441.0	448.2	442.0	442.0	1957.....	...	0.0	2.1	7.2	-3.4	32.1	
1958.....	435.0	439.9	453.1	466.3	448.9	1958.....	...	-7.0	4.1	13.2	13.2	6.1	
1959.....	476.0	489.9	486.5	493.5	486.5	1959.....	...	9.7	13.9	-3.4	7.0	...	
1960.....	506.6	506.5	506.2	504.6	506.0	1960.....	...	13.1	-0.1	-0.3	-1.6	19.5	
1961.....						523.3	1961.....						140.5
1962.....						563.0	1962.....						17.3
1963.....						594.7	1963.....						40.5
1964.....						635.7	1964.....						30.9
1965.....						688.1	1965.....						41.0
1966.....						753.0	1966.....						52.4
1967.....						796.3	1967.....						64.9
1968.....						894.7	1968.....						47.3
1969.....						953.5	1969.....						43.0
1970.....						982.4	1970.....						46.9
1971.....						1063.4	1971.....						81.0
1972.....						1171.1	1972.....						107.7
1973.....						1306.6	1973.....						139.5
1974.....						1412.9	1974.....						106.3
1975.....						1520.8	1975.....						115.9
1976.....						1706.5	1976.....						177.7
1977.....						...	1977.....						...
264. FEDERAL GOVERNMENT PURCHASES OF GOODS AND SERVICES, NATIONAL DEFENSE (ANNUAL RATE, BILLIONS OF DOLLARS)						AVERAGE	264-B. CHANGE IN FEDERAL GOVERNMENT PURCHASES OF GOODS AND SERVICES, NATIONAL DEFENSE (ANNUAL RATE, BILLION DOLLARS)						DIFFERENCE ¹
1945.....	...	...	...	...	...	1945.....	...	...	...	...	...	...
1946.....	20.4	14.8	12.8	12.3	14.0	1946.....	...	-4.8	-4.8	-3.3	-5.8	...	
1947.....	9.4	8.9	8.6	9.3	9.0	1947.....	...	-0.5	-0.3	0.7	...	...
1948.....	9.0	10.3	10.6	12.0	10.7	1948.....	...	0.5	0.3	1.4	1.7	...	
1949.....	12.7	13.4	13.6	13.1	13.2	1949.....	...	0.7	0.7	0.3	-0.5	2.5	
1950.....	12.4	12.5	14.1	16.9	14.0	1950.....	...	-0.7	0.1	1.6	2.6	...	
1951.....	24.0	30.3	37.7	42.0	33.5	1951.....	...	7.1	6.3	7.4	4.3	19.5	
1952.....	42.4	45.6	46.9	48.5	45.0	1952.....	...	0.4	3.2	1.3	1.6	12.3	
1953.....	49.1	49.5	48.3	47.5	48.6	1953.....	...	0.6	0.4	-1.2	-0.8	2.0	
1954.....	44.3	41.9	39.0	38.4	41.1	1954.....	...	-3.2	-2.4	-2.1	-1.4	...	
1955.....	38.6	38.1	39.1	39.0	38.4	1955.....	...	0.2	-0.5	1.0	-1.1	-2.7	
1956.....	36.3	40.3	40.2	41.9	40.2	1956.....	...	0.3	3.0	-0.1	1.7	1.0	
1957.....	43.3	43.9	44.6	44.3	44.0	1957.....	...	1.4	0.6	0.7	-0.3	3.0	
1958.....	44.5	45.4	45.9	46.5	45.6	1958.....	...	0.2	0.9	0.5	0.6	...	
1959.....	46.1	45.5	45.6	45.1	45.6	1959.....	...	-0.4	-0.6	0.1	-0.5	0.0	
1960.....	43.9	43.8	44.8	45.3	44.5	1960.....	...	-1.2	-0.1	1.0	0.5	-1.1	
1961.....						47.0	1961.....						2.5
1962.....						51.3	1962.....						4.1
1963.....						50.3	1963.....						-0.6
1964.....						49.0	1964.....						1.0
1965.....						49.4	1965.....						0.4
1966.....						60.3	1966.....						10.9
1967.....						71.5	1967.....						11.2
1968.....						76.9	1968.....						10.8
1969.....						76.3	1969.....						1.0
1970.....						73.5	1970.....						-2.0
1971.....						70.0	1971.....						-3.3
1972.....						73.5	1972.....						1.6
1973.....						77.0	1973.....						1.9
1974.....						74.6	1974.....						3.0
1975.....						83.9	1975.....						6.9
1976.....						86.4	1976.....						2.9
1977.....						...	1977.....						...

NOTE: These series contain revisions beginning with 1974. ¹Year-to-year differences are computed from annual data.

(OCTOBER 1977)

Appendix C. HISTORICAL DATA—Continued

Year	Quarterly				Annual	Year	Quarterly				Annual
	I Q	II Q	III Q	IV Q			I Q	II Q	III Q	IV Q	
546. TRANSFERS UNDER U.S. MILITARY AGENCY SALES CONTRACTS (EXPORTS), NOT SEAS. ADJ. (MILLIONS OF DOLLARS)					TOTAL	546. TRANSFERS UNDER U.S. MILITARY AGENCY SALES CONTRACTS (EXPORTS), SEASONALLY ADJ. (MILLIONS OF DOLLARS)					
1953.....	...	...	...	...	192	1953.....	...	...	...	...
1954.....	...	...	...	...	182	1954.....	...	...	...	...
1955.....	...	...	...	...	200	1955.....	...	...	...	...
1956.....	...	...	...	...	161	1956.....	...	...	...	...
1957.....	...	...	...	...	375	1957.....	...	...	...	...
1958.....	...	...	...	...	300	1958.....	...	...	...	...
1959.....	...	...	...	...	302	1959.....	...	...	...	...
1960.....	58	122	89	85	335	1960.....	71	89	88	86	
1961.....	71	150	89	93	402	1961.....	86	112	111	94	
1962.....	96	228	127	206	656	1962.....	110	189	154	204	
1963.....	146	243	103	145	657	1963.....	187	195	127	148	
1964.....	198	187	162	201	747	1964.....	207	151	192	198	
1965.....	200	225	194	211	830	1965.....	207	188	229	206	
1966.....	193	257	172	207	829	1966.....	196	214	203	216	
1967.....	328	287	208	328	1,152	1967.....	329	239	242	341	
1968.....	299	415	339	340	1,392	1968.....	302	343	392	356	
1969.....	395	380	415	338	1,528	1969.....	412	327	452	337	
1970.....	268	487	313	433	1,501	1970.....	281	435	357	428	
1971.....	484	577	433	432	1,926	1971.....	507	506	494	419	
1972.....	316	321	227	289	1,163	1972.....	332	281	255	295	
1973.....	332	504	489	1,017	2,342	1973.....	347	455	531	1,009	
1974.....	644	738	720	850	2,952	1974.....	638	784	850	850	
1975.....	946	888	902	1,183	3,919	1975.....	924	878	957	1,164	
1976.....	1,132	1,193	1,403	1,486	5,213	1976.....	1,095	1,189	1,472	1,457	
1977.....	...	...	...	...	...	1977.....	...	...	...	...
547. DIRECT DEFENSE EXPENDITURES (EXPORTS) NOT SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)					TOTAL	513. NATIONAL DEFENSE PURCHASES AS A PERCENT OF GROSS NATIONAL PRODUCT ¹ (PERCENT)					AVERAGE ²
1945.....	...	...	...	...	...	1945.....	...	...	...	...	...
1946.....	...	...	...	...	493	1946.....	10.3	7.0	5.6	5.4	7.1
1947.....	...	...	...	...	455	1947.....	4.2	3.9	3.7	3.8	3.9
1948.....	...	...	...	...	799	1948.....	3.9	4.0	4.0	4.5	4.1
1949.....	...	...	...	...	821	1949.....	4.9	5.2	5.3	5.1	5.1
1950.....	...	...	...	...	576	1950.....	4.6	4.3	4.8	5.5	4.9
1951.....	...	...	...	...	1,270	1951.....	7.3	9.2	11.3	12.4	10.1
1952.....	...	...	...	...	2,054	1952.....	12.4	13.4	13.5	13.5	13.2
1953.....	...	...	...	...	2,615	1953.....	13.4	13.4	10.1	13.1	13.3
1954.....	...	...	...	...	2,642	1954.....	12.2	11.6	10.9	10.2	11.2
1955.....	...	...	...	...	2,901	1955.....	10.0	9.6	9.7	9.3	9.6
1956.....	...	...	...	...	2,949	1956.....	9.3	9.7	9.3	9.7	9.6
1957.....	...	...	...	...	3,216	1957.....	9.9	10.0	10.0	10.0	9.9
1958.....	...	...	...	...	3,435	1958.....	10.2	10.3	10.1	10.0	10.2
1959.....	...	...	...	...	3,107	1959.....	9.7	9.3	9.4	9.1	9.4
1960.....	781	769	801	737	3,087	1960.....	8.7	8.6	8.9	9.0	8.8
1961.....	786	781	705	727	2,990	1961.....	9.1	9.0	8.9	9.0	9.0
1962.....	770	763	781	810	3,105	1962.....	9.2	9.1	9.0	8.9	9.1
1963.....	763	748	738	725	2,961	1963.....	8.7	8.6	8.4	8.2	8.5
1964.....	747	737	699	697	2,880	1964.....	8.0	7.8	7.6	7.4	7.7
1965.....	676	719	763	794	2,952	1965.....	7.1	7.1	7.1	7.4	7.2
1966.....	877	925	975	987	3,764	1966.....	7.5	7.8	8.3	8.4	8.0
1967.....	1,085	1,075	1,106	1,112	4,378	1967.....	8.9	9.0	9.0	9.0	8.9
1968.....	1,103	1,112	1,147	1,173	4,535	1968.....	9.1	9.0	8.7	8.7	8.9
1969.....	1,198	1,187	1,221	1,251	4,856	1969.....	8.2	8.1	8.1	8.1	8.2
1970.....	1,178	1,259	1,211	1,208	4,855	1970.....	7.9	7.5	7.3	7.3	7.5
1971.....	1,174	1,206	1,203	1,236	4,819	1971.....	7.0	6.8	6.4	6.4	6.8
1972.....	1,222	1,272	1,105	1,185	4,784	1972.....	6.8	6.4	6.1	6.0	6.3
1973.....	1,169	1,231	1,067	1,162	4,629	1973.....	5.9	5.7	5.5	5.5	5.6
1974.....	1,153	1,298	1,265	1,319	5,035	1974.....	5.4	5.4	5.4	5.5	5.4
1975.....	1,317	1,185	1,096	1,198	4,789	1975.....	5.6	5.3	5.3	5.4	5.5
1976.....	1,168	1,228	1,237	1,222	4,847	1976.....	5.2	5.1	5.0	5.0	5.1
1977.....	...	...	...	...	...	1977.....	...	...	...	...	...
596. U.S. GOVT. CASH RECEIPTS ASSOCIATED WITH MILITARY SALES CONTRACTS, NOT SEAS. ADJ. (MILLIONS OF DOLLARS)					TOTAL	596. U.S. GOVT. CASH RECEIPTS ASSOCIATED WITH MILITARY SALES CONTRACTS, SEASONALLY ADJ. (MILLIONS OF DOLLARS)					
1960.....	248	83	66	112	509	1960.....	255	82	112	60	
1961.....	59	95	82	105	340	1961.....	58	103	140	39	
1962.....	124	113	125	317	679	1962.....	119	131	194	235	
1963.....	247	233	136	379	995	1963.....	231	266	216	282	
1964.....	361	116	152	358	987	1964.....	344	149	233	261	
1965.....	242	341	175	328	1,086	1965.....	326	371	259	230	
1966.....	258	125	173	371	927	1966.....	247	149	253	278	
1967.....	347	397	113	167	1,023	1967.....	343	418	195	67	
1968.....	185	274	162	365	968	1968.....	213	281	229	243	
1969.....	235	318	299	591	1,443	1969.....	288	318	389	468	
1970.....	287	287	182	265	861	1970.....	269	262	258	141	
1971.....	204	278	214	388	1,066	1971.....	263	275	244	244	
1972.....	237	374	325	456	1,392	1972.....	278	372	357	383	
1973.....	520	544	610	816	2,290	1973.....	566	552	617	555	
1974.....	497	642	995	808	2,942	1974.....	546	650	990	756	
1975.....	1,050	1,013	1,148	1,376	4,587	1975.....	...	...	...	...
1976.....	2,246	1,858	2,041	2,068	8,213	1976.....	...	...	...	...
1977.....	...	...	...	...	...	1977.....	...	...	...	...

NOTE: Unless otherwise noted, these series contain revisions beginning with 1975. ¹This series contains revisions beginning with 1974. ²Annual figures are computed from annual data for series 200 and 264. (OCTOBER 1977)

Appendix C. HISTORICAL DATA—Continued

Year	Quarterly				Annual	Year	Quarterly				Annual
	I Q	II Q	III Q	IV Q			I Q	II Q	III Q	IV Q	
650. MANUFACTURERS' NEW ORDERS FROM THE U.S. GOVERNMENT, AEROSPACE INDUSTRIES, SEASONALLY ADJ. ¹ (MILLION DOLLARS)						644. MANUFACTURERS' UNFILLED ORDERS FROM THE U.S. GOVERNMENT, AEROSPACE INDUSTRIES, SEASONALLY ADJ. ² (MILLIONS OF DOLLARS)					
					TOTAL					END OF PERIOD	
1952.....	2,639	2,172	3,399	3,175	11,385	1952.....	13,781	14,379	16,080	17,444	17,444
1953.....	3,192	2,717	1,468	595	7,972	1953.....	18,582	19,001	18,386	16,554	16,554
1954.....	1,529	1,334	1,685	1,717	6,265	1954.....	16,187	15,371	15,093	14,661	14,661
1955.....	1,555	2,099	2,197	3,168	9,019	1955.....	14,036	13,968	14,153	15,503	15,503
1956.....	2,803	3,265	3,942	2,380	12,390	1956.....	16,179	17,209	16,757	18,097	18,097
1957.....	2,322	1,631	1,211	2,695	7,749	1957.....	17,636	16,304	14,771	14,359	14,359
1958.....	2,851	2,393	2,278	2,529	10,151	1958.....	14,168	13,695	13,356	13,054	13,054
1959.....	2,207	3,189	2,214	2,608	10,210	1959.....	12,542	12,862	12,342	12,036	12,036
1960.....	2,973	2,718	3,328	2,471	11,490	1960.....	12,091	11,955	12,794	12,421	12,421
1961.....	2,200	2,638	2,972	3,030	10,440	1961.....	11,673	11,450	11,127	11,018	11,018
1962.....	2,561	2,839	3,194	3,341	11,935	1962.....	10,578	10,370	10,484	10,556	10,556
1963.....	4,084	3,492	3,741	2,750	14,067	1963.....	18,424	18,139	11,521	10,928	10,928
1964.....	3,857	3,723	3,032	2,913	13,525	1964.....	11,607	11,448	11,868	11,605	11,605
1965.....	3,052	3,652	3,451	4,344	14,499	1965.....	11,561	11,992	12,593	13,628	13,628
1966.....	4,138	3,364	4,913	3,662	16,078	1966.....	14,301	13,841	15,442	15,948	15,948
1967.....	3,966	5,408	3,906	5,352	18,632	1967.....	15,438	16,388	16,588	17,627	17,627
1968.....	4,058	4,555	4,540	3,348	16,521	1968.....	16,009	16,024	17,227	16,117	16,117
1969.....	4,927	2,754	3,290	3,636	14,607	1969.....	16,982	15,298	14,783	14,101	14,101
1970.....	3,279	4,203	3,936	3,687	15,105	1970.....	13,341	13,277	13,128	12,869	12,869
1971.....	4,040	3,546	3,843	3,730	15,161	1971.....	12,881	12,431	13,013	13,836	13,836
1972.....	3,399	4,369	3,453	3,585	14,806	1972.....	14,052	15,233	14,819	15,106	15,106
1973.....	4,068	4,095	3,568	4,199	15,922	1973.....	15,533	16,084	15,904	16,448	16,448
1974.....	4,705	3,073	5,709	5,627	19,114	1974.....	17,378	16,447	19,002	20,662	20,662
1975.....	4,415	3,912	4,783	5,227	18,337	1975.....	20,907	21,230	20,906	21,776	21,776
1976.....	5,426	5,272	3,818	6,663	21,179	1976.....	22,598	22,883	22,020	21,666	21,666
1977.....						1977.....					
646. DEFENSE DEPARTMENT PROGRESS PAYMENTS OUTSTANDING, NOT SEASONALLY ADJUSTED (MILLIONS OF DOLLARS)						689. MANUFACTURERS' SHIPMENTS TO THE U.S. GOVERNMENT, AEROSPACE INDUSTRIES, SEASONALLY ADJ. ² (MILLION DOLLARS)					
					END OF PERIOD					TOTAL	
1952.....	...	...	...	...	...	1952.....	1,350	1,491	1,667	1,969	6,477
1953.....	...	...	...	...	...	1953.....	2,104	2,131	2,164	2,111	8,530
1954.....	4,547	4,347	4,207	4,438	4,438	1954.....	2,097	2,106	2,049	2,049	8,301
1955.....	4,283	4,265	4,192	4,055	4,055	1955.....	2,231	2,134	2,092	2,012	9,469
1956.....	4,221	4,470	3,889	3,817	3,817	1956.....	2,023	2,190	2,379	2,863	9,455
1957.....	3,916	4,046	4,072	3,898	3,898	1957.....	2,799	2,965	3,005	2,978	11,747
1958.....	3,625	3,297	2,861	2,641	2,641	1958.....	3,008	2,829	2,845	2,793	11,475
1959.....	2,626	2,201	2,257	2,189	2,189	1959.....	2,698	2,793	2,891	2,862	11,244
1960.....	2,343	2,358	2,335	2,462	2,462	1960.....	2,880	2,808	2,632	2,603	11,003
1961.....	2,534	2,539	2,391	2,344	2,344	1961.....	2,844	2,987	2,966	2,943	11,760
1962.....	2,441	2,361	2,554	2,823	2,823	1962.....	3,136	3,053	3,151	3,211	12,551
1963.....	3,115	3,303	3,226	3,308	3,308	1963.....	3,345	3,191	3,495	3,370	13,201
1964.....	3,347	3,239	3,243	3,207	3,207	1964.....	3,216	3,349	3,126	3,119	12,810
1965.....	3,257	3,545	3,939	3,934	3,934	1965.....	3,095	3,063	3,079	3,285	12,522
1966.....	4,402	4,346	4,750	5,461	5,461	1966.....	3,418	3,532	3,810	3,749	14,509
1967.....	5,981	6,765	7,179	7,491	7,491	1967.....	3,836	4,044	4,130	4,290	16,300
1968.....	7,681	8,237	8,193	8,554	8,554	1968.....	4,298	3,985	4,144	4,185	16,592
1969.....	9,165	9,463	9,512	9,782	9,782	1969.....	4,114	4,140	4,073	4,212	16,539
1970.....	9,821	9,841	9,771	9,384	9,384	1970.....	4,095	4,175	4,205	3,940	16,415
1971.....	9,313	7,723	7,669	7,181	7,181	1971.....	3,665	4,027	3,484	3,128	14,224
1972.....	7,297	7,043	6,866	6,668	6,668	1972.....	3,298	3,225	3,767	3,275	13,565
1973.....	6,942	7,028	7,139	7,385	7,385	1973.....	3,599	3,607	3,612	3,611	14,429
1974.....	7,781	8,104	8,531	9,166	9,166	1974.....	3,696	3,780	3,834	3,888	15,198
1975.....	9,609	10,464	11,008	11,257	11,257	1975.....	4,105	4,104	4,847	4,203	17,339
1976.....	9,648	12,041	11,081	8,465	8,465	1976.....	4,564	5,056	4,528	4,970	19,138
1977.....						1977.....					

NOTE: These series contain no revisions but are reprinted for the convenience of the user. ¹Data prior to 1961 include orders from non-Government customers. ²Data prior to 1961 include shipments to non-Government customers.

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Appendix C. HISTORICAL DATA—Continued

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
653. AVERAGE WEEKLY OVERTIME HOURS, PRODUCTION WORKERS, DEFENSE PRODUCTS INDUSTRIES, NOT SEASONALLY ADJUSTED																	
	(HOURS)												AVERAGE FOR PERIOD				
1958...	1.6	1.5	1.5	1.4	1.5	1.6	1.8	2.0	2.3	2.4	2.2	2.3	1.5	1.5	2.0	2.3	1.8
1959...	2.2	2.0	2.0	2.0	2.2	2.3	2.2	2.2	2.4	2.3	2.2	2.4	2.1	2.2	2.3	2.3	2.6
1960...	2.4	2.3	2.2	1.6	2.1	2.2	1.9	2.3	2.4	2.5	2.5	2.6	2.3	2.0	2.2	2.6	2.3
1961...	2.3	2.3	2.1	2.0	1.8	1.9	1.9	2.1	2.5	2.4	2.8	3.0	2.2	1.9	2.2	2.7	2.3
1962...	2.8	2.5	2.0	2.5	2.5	2.4	2.3	2.5	2.9	2.8	2.8	3.0	2.7	2.5	2.6	2.9	2.6
1963...	2.6	2.5	2.2	1.7	2.1	2.3	2.2	2.4	2.6	2.5	2.4	2.5	2.4	2.0	2.4	2.5	2.3
1964...	2.1	2.0	2.0	2.0	1.9	2.2	2.1	2.0	2.5	2.6	2.6	2.6	2.1	2.0	2.3	2.7	2.3
1965...	2.5	2.3	2.4	1.8	2.5	2.8	2.8	3.4	3.5	3.7	4.3	4.5	2.4	2.4	3.2	4.2	3.0
1966...	4.7	4.3	4.3	4.0	4.4	4.3	4.1	4.4	4.5	4.3	4.5	4.3	4.4	4.2	4.3	4.4	4.3
1967...	4.0	3.9	3.8	3.6	3.7	3.4	3.7	3.9	4.2	3.9	4.2	4.2	3.9	3.6	3.9	4.1	3.9
1968...	3.8	3.7	3.3	2.5	3.3	3.5	3.3	3.4	3.6	3.4	3.5	3.8	3.6	3.1	3.4	3.6	3.4
1969...	3.1	3.1	3.1	2.8	2.9	3.1	3.0	3.2	3.4	3.2	3.6	3.8	3.1	2.9	3.2	3.5	3.2
1970...	3.4	2.8	2.7	2.5	2.5	2.7	2.3	2.5	2.4	2.5	2.6	2.7	3.0	2.6	2.4	2.6	2.6
1971...	2.3	2.0	2.1	1.8	1.9	2.2	2.0	2.4	2.6	2.6	2.6	2.6	2.1	2.0	2.3	2.7	2.3
1972...	2.4	2.5	2.7	2.5	2.4	2.8	2.4	2.7	3.2	3.0	3.1	3.3	2.5	2.6	2.8	3.1	2.8
1973...	2.9	3.0	2.9	2.8	2.9	2.8	2.7	2.8	3.4	3.2	3.6	3.7	2.9	2.8	3.0	3.5	3.1
1974...	2.9	2.7	2.8	2.1	2.8	3.0	2.7	2.8	2.9	2.8	2.9	3.0	2.8	2.6	2.8	2.9	2.8
1975...	2.4	2.4	2.3	2.1	2.0	2.5	2.2	2.6	2.8	2.7	2.7	2.9	2.4	2.2	2.3	2.8	2.5
1976...	2.5	2.5	2.4	1.7	2.3	2.5	2.4	2.7	2.6	2.8	2.8	3.2	2.5	2.2	2.6	2.9	2.5
1977...																	
653. AVERAGE WEEKLY OVERTIME HOURS, PRODUCTION WORKERS, DEFENSE PRODUCTS INDUSTRIES, SEASONALLY ADJUSTED																	
	(HOURS)												AVERAGE FOR PERIOD				
1958...	1.5	1.5	1.6	1.6	1.7	1.7	2.0	2.0	2.1	2.2	2.1	2.0	1.5	1.7	2.0	2.1	
1959...	2.1	2.0	2.1	2.2	2.4	2.4	2.4	2.2	2.2	2.1	2.1	2.1	2.1	2.3	2.3	2.1	
1960...	2.3	2.3	2.3	1.8	2.3	2.3	2.1	2.4	2.2	2.3	2.3	2.4	2.3	2.1	2.2	2.3	
1961...	2.2	2.3	2.2	2.2	2.0	2.0	2.2	2.2	2.3	2.2	2.6	2.6	2.2	2.1	2.2	2.5	
1962...	2.7	2.5	2.9	2.7	2.8	2.5	2.6	2.5	2.7	2.6	2.6	2.6	2.7	2.7	2.6	2.6	
1963...	2.5	2.3	2.3	2.0	2.4	2.4	2.5	2.4	2.4	2.3	2.1	2.1	2.4	2.3	2.4	2.2	
1964...	2.1	2.1	2.1	2.3	2.2	2.3	2.4	2.3	2.3	2.4	2.3	2.4	2.1	2.3	2.3	2.4	
1965...	2.4	2.4	2.5	2.1	2.8	2.9	3.0	3.4	3.3	3.5	4.0	4.1	2.4	2.6	3.2	3.9	
1966...	4.8	4.4	4.5	4.4	4.6	4.5	4.3	4.4	4.2	4.2	4.2	3.9	4.5	4.5	4.3	4.1	
1967...	3.9	4.0	4.0	4.0	3.9	3.5	3.9	3.9	3.9	3.0	3.9	3.7	4.0	3.8	3.9	3.8	
1968...	3.8	3.8	3.5	2.9	3.5	3.6	3.5	3.4	3.3	3.3	3.2	3.3	3.7	3.3	3.4	3.3	
1969...	3.1	3.2	3.2	3.2	3.2	3.1	3.2	3.2	3.1	3.1	3.3	3.3	3.2	3.2	3.2	3.2	
1970...	3.4	2.9	2.8	2.9	2.8	2.7	2.6	2.5	2.1	2.4	2.3	2.3	3.0	2.8	2.4	2.3	
1971...	2.3	2.1	2.2	2.1	2.2	2.2	2.3	2.4	2.3	2.5	2.3	2.4	2.2	2.2	2.3	2.4	
1972...	2.4	2.6	2.8	2.8	2.7	2.8	2.7	2.7	2.9	2.9	2.8	2.9	2.6	2.8	2.8	2.9	
1973...	3.0	3.1	3.0	3.1	3.2	2.8	3.0	2.8	3.1	3.1	3.3	3.3	3.0	3.0	3.0	3.2	
1974...	3.0	2.8	2.9	2.4	3.1	3.0	3.0	2.8	2.6	2.7	2.6	2.6	2.9	2.8	2.8	2.6	
1975...	2.5	2.5	2.5	2.4	2.3	2.4	2.5	2.6	2.5	2.6	2.5	2.5	2.5	2.4	2.5	2.5	
1976...	2.6	2.6	2.5	2.0	2.6	2.5	2.7	2.7	2.3	2.7	2.5	2.8	2.6	2.4	2.6	2.7	
1977...																	
653. AVERAGE WEEKLY OVERTIME HOURS, PRODUCTION WORKERS, DEFENSE PRODUCTS INDUSTRIES, 4-MONTH MOVING AVERAGE OF SEASONALLY ADJUSTED DATA (HOURS)																	
1958...	...	...	1.5	1.6	1.6	1.7	1.8	1.9	2.1	2.1	2.1	2.1					
1959...	2.0	2.0	2.1	2.2	2.3	2.3	2.3	2.3	2.2	2.1	2.1	2.1					
1960...	2.2	2.2	2.2	2.2	2.2	2.1	2.3	2.2	2.2	2.3	2.3	2.3					
1961...	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.3	2.4	2.5					
1962...	2.6	2.7	2.7	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.6					
1963...	2.5	2.5	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.3	2.2	2.1					
1964...	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.4					
1965...	2.4	2.4	2.3	2.4	2.6	2.7	3.0	3.1	3.3	3.5	3.7	4.0					
1966...	4.3	4.4	4.5	4.5	4.5	4.4	4.4	4.3	4.3	4.2	4.1	4.0					
1967...	4.0	3.9	4.0	4.0	3.8	3.8	3.8	3.8	3.9	3.9	3.8	3.8					
1968...	3.8	3.7	3.5	3.4	3.4	3.4	3.5	3.4	3.4	3.3	3.3	3.2					
1969...	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.2	3.2	3.3					
1970...	3.2	3.1	3.0	2.8	2.8	2.8	2.6	2.5	2.4	2.3	2.3	2.3					
1971...	2.3	2.2	2.2	2.1	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.4					
1972...	2.4	2.5	2.6	2.7	2.8	2.8	2.7	2.8	2.8	2.8	2.9	2.9					
1973...	2.9	3.0	3.0	3.1	3.0	3.0	2.9	2.9	3.0	3.1	3.2	3.2					
1974...	3.1	3.0	2.8	2.6	2.8	2.9	3.0	2.8	2.8	2.7	2.6	2.6					
1975...	2.6	2.5	2.5	2.4	2.4	2.4	2.4	2.5	2.6	2.6	2.5	2.6					
1976...	2.6	2.6	2.4	2.4	2.4	2.4	2.6	2.6	2.6	2.6	2.6	2.7					
1977...																	

NOTE: These series contain no revisions but are reprinted for the convenience of the user.

(OCTOBER 1977)

Appendix C. HISTORICAL DATA—Continued

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
654. ACCESSION RATE, DEFENSE PRODUCTS INDUSTRIES, NOT SEASONALLY ADJUSTED (PER 100 EMPLOYEES)																	
													AVERAGE FOR PERIOD				
1950...	1.9	2.2	2.4	2.3	2.4	3.5	2.7	2.9	3.3	2.9	3.3	2.1	2.2	2.7	3.0	2.4	2.6
1959...	2.9	2.7	2.7	2.5	2.9	4.0	3.1	3.0	3.0	2.6	2.2	2.0	2.0	3.0	3.0	2.3	2.0
1960...	2.5	2.5	3.2	2.0	2.1	3.3	2.6	3.3	3.3	3.2	2.5	2.1	2.4	2.5	3.1	2.6	2.6
1961...	2.6	2.4	2.3	2.3	2.5	3.4	2.6	3.1	3.3	3.5	3.1	2.6	2.4	2.7	3.0	3.1	2.0
1962...	3.3	3.1	3.1	2.9	2.9	3.9	3.4	3.1	3.2	3.1	2.4	2.0	3.2	3.3	3.2	2.5	3.0
1963...	2.7	2.1	2.2	2.2	2.1	3.1	2.6	2.5	2.0	2.6	1.9	1.7	2.3	2.5	2.4	2.1	2.4
1964...	2.0	1.9	2.1	1.9	1.8	2.0	2.2	2.5	2.6	2.4	2.0	1.0	2.0	2.3	2.4	2.1	2.2
1965...	2.2	2.3	2.6	2.4	2.6	3.0	3.3	3.0	3.6	3.6	3.5	3.1	3.4	2.9	3.0	3.4	3.1
1966...	4.1	3.0	3.9	3.5	3.0	5.4	4.1	4.3	4.2	4.4	3.3	2.4	3.9	4.3	4.2	3.4	3.9
1967...	3.2	3.1	3.0	2.9	2.9	4.6	3.5	3.7	3.6	3.5	2.7	2.1	3.1	3.5	3.6	2.0	3.2
1968...	2.0	2.5	2.4	2.4	2.4	3.7	2.0	2.7	3.0	2.7	2.0	1.7	2.8	2.9	2.9	2.1	2.4
1969...	2.3	2.1	2.4	2.1	2.0	3.4	2.4	2.3	3.1	2.4	1.7	1.5	2.3	2.3	2.6	1.9	2.3
1970...	1.8	1.0	1.7	1.6	1.0	2.5	1.0	1.0	1.7	1.6	1.4	1.1	1.0	1.0	1.0	1.4	1.7
1971...	1.7	1.3	1.5	1.5	1.7	2.2	1.9	2.1	1.9	1.7	1.4	1.2	1.5	1.0	2.0	1.5	1.7
1972...	1.0	1.7	1.9	1.0	2.2	2.5	2.2	3.6	2.5	2.4	1.9	1.4	1.8	2.2	2.4	1.9	2.1
1973...	2.5	2.0	2.0	2.0	2.2	2.9	2.5	2.6	2.4	2.5	2.0	1.3	2.2	2.4	2.5	1.9	2.2
1974...	2.1	1.0	1.9	2.1	2.2	2.0	2.6	2.6	2.6	2.1	1.3	0.9	1.9	2.4	2.6	1.4	2.1
1975...	1.4	1.3	1.3	1.9	1.3	1.7	1.6	1.6	1.7	1.4	1.0	0.8	1.3	1.6	1.6	1.1	1.4
1976...	1.3	1.3	1.5	1.2	1.6	2.1	1.6	2.0	1.9	1.0	1.0	0.9	1.4	1.6	1.8	1.4	1.6
1977...																	
654. ACCESSION RATE, DEFENSE PRODUCTS INDUSTRIES, SEASONALLY ADJUSTED (PER 100 EMPLOYEES)																	
													AVERAGE FOR PERIOD				
1950...	1.9	2.4	2.6	2.7	2.7	2.7	2.7	2.6	2.0	2.5	2.6	2.7	2.3	2.7	2.7	2.6	
1959...	2.9	2.9	2.9	2.9	2.0	3.2	3.1	2.7	2.5	2.2	2.5	2.6	2.9	3.0	2.8	2.4	
1960...	2.5	2.7	2.4	2.4	2.4	2.5	2.5	3.0	2.0	2.0	2.0	2.7	2.5	2.4	2.8	2.0	
1961...	2.6	2.6	2.5	2.6	2.0	2.6	2.5	2.0	2.0	3.1	3.4	3.2	2.6	2.7	2.7	3.3	
1962...	3.4	3.3	3.3	3.2	3.2	3.2	3.3	2.0	2.0	2.7	2.6	2.6	3.3	3.2	3.0	2.6	
1963...	2.0	2.3	2.4	2.5	2.4	2.3	2.5	2.2	2.4	2.3	2.2	2.3	2.5	2.4	2.4	2.3	
1964...	2.1	2.1	2.2	2.2	2.1	2.0	2.0	2.2	2.2	2.1	2.3	2.4	2.1	2.1	2.1	2.3	
1965...	2.4	2.5	2.7	2.7	2.9	3.1	3.1	3.0	3.7	3.3	3.0	3.7	2.5	2.9	3.3	3.6	
1966...	4.3	4.1	4.1	3.0	4.1	4.4	3.9	3.9	3.0	4.1	3.6	3.1	4.2	4.1	3.9	3.6	
1967...	3.4	3.4	3.2	3.2	3.2	3.6	3.3	3.3	3.2	3.2	3.0	2.0	3.3	3.3	3.3	3.0	
1968...	2.9	2.0	2.6	2.7	2.8	2.7	2.6	2.4	2.6	2.5	2.3	2.4	2.0	2.7	2.5	2.4	
1969...	2.4	2.4	2.6	2.3	2.2	2.4	2.2	2.0	2.2	2.2	2.0	2.2	2.5	2.3	2.3	2.2	
1970...	1.9	2.1	1.9	1.0	1.7	1.6	1.6	1.5	1.4	1.5	1.7	1.8	2.0	1.7	1.5	1.7	
1971...	1.0	1.0	1.7	1.7	1.0	1.4	1.7	1.7	1.6	1.6	1.9	1.9	1.7	1.6	1.7	1.0	
1972...	1.9	2.0	2.1	2.0	2.2	3.7	2.0	2.2	2.2	2.3	2.1	2.1	2.0	2.0	2.1	2.2	
1973...	2.5	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.3	2.3	2.3	2.2	2.2	2.2	
1974...	2.2	2.1	2.1	2.3	2.2	2.1	2.3	2.2	2.2	1.9	1.6	1.7	2.1	2.2	2.2	1.7	
1975...	1.6	1.6	1.6	2.1	1.3	1.0	1.3	1.2	1.3	1.2	1.3	1.6	1.6	1.5	1.3	1.4	
1976...	1.4	1.6	1.7	1.4	1.6	1.5	1.3	1.6	1.5	1.6	1.9	1.7	1.6	1.5	1.5	1.7	
1977...																	
654. ACCESSION RATE, DEFENSE PRODUCTS INDUSTRIES, 4-MONTH MOVING AVERAGE OF SEASONALLY ADJUSTED DATA (PER 100 EMPLOYEES)																	
1950...	...	...	2.4	2.6	2.7	2.7	2.7	2.7	2.7	2.6	2.7	2.7	2.3	2.7	2.7	2.6	
1959...	2.0	2.9	2.9	2.9	2.9	3.0	3.0	2.9	2.6	2.5	2.5	2.5	2.9	2.5	2.5	2.5	
1960...	2.6	2.6	2.5	2.5	2.4	2.5	2.6	2.7	2.0	2.9	2.0	2.7	2.5	2.4	2.8	2.7	
1961...	2.7	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.8	2.8	3.0	3.1	3.0	3.1	3.1	3.3	
1962...	3.3	3.3	3.3	3.3	3.2	3.2	3.1	3.0	2.9	2.7	2.7	2.7	3.3	3.2	3.2	3.0	
1963...	2.6	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.5	2.4	2.4	2.3	
1964...	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.3	
1965...	2.4	2.5	2.6	2.7	2.0	2.9	3.1	3.2	3.3	3.5	3.5	3.6	3.9	3.9	3.9	3.6	
1966...	4.0	4.1	4.1	4.0	4.1	4.1	4.1	4.0	3.9	3.9	3.9	3.6	4.2	4.1	3.9	3.6	
1967...	3.4	3.0	3.3	3.3	3.3	3.3	3.4	3.4	3.3	3.2	3.1	3.0	3.3	3.3	3.3	3.0	
1968...	2.9	2.0	2.0	2.7	2.6	2.6	2.6	2.6	2.5	2.4	2.4	2.4	2.0	2.7	2.5	2.4	
1969...	2.4	2.4	2.4	2.4	2.4	2.3	2.2	2.3	2.3	2.3	2.3	2.1	2.1	2.1	2.1	2.1	
1970...	2.0	2.0	1.9	1.9	1.0	1.7	1.6	1.5	1.5	1.5	1.6	1.7	1.5	1.6	1.7	1.5	
1971...	1.7	1.7	1.7	1.6	1.6	1.7	1.0	1.0	1.9	2.0	2.0	2.0	1.7	1.6	1.7	1.5	
1972...	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.3	2.0	2.0	2.1	2.2	
1973...	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1974...	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.0	1.0	1.7	1.6	1.6	1.6	
1975...	1.6	1.6	1.7	1.6	1.5	1.4	1.2	1.2	1.2	1.2	1.4	1.4	1.6	1.5	1.3	1.4	
1976...	1.5	1.6	1.5	1.6	1.6	1.4	1.5	1.5	1.5	1.6	1.7	1.9	1.6	1.5	1.5	1.7	
1977...																	
655. LAYOFF RATE, DEFENSE PRODUCTS INDUSTRIES, NOT SEASONALLY ADJUSTED (PER 100 EMPLOYEES)																	
													AVERAGE FOR PERIOD				
1950...	2.4	1.9	1.0	1.0	1.7	1.4	1.0	0.9	1.0	1.1	0.0	1.2	2.0	1.6	1.0	1.0	1.4
1959...	1.6	1.0	1.2	1.0	1.0	0.0	1.1	0.9	1.1	1.2	1.3	1.2	1.3	0.9	1.0	1.2	1.1
1960...	1.5	1.3	1.5	1.7	1.3	1.3	1.3	1.0	1.1	1.2	1.0	1.1	1.4	1.4	1.1	1.1	1.3
1961...	1.2	1.4	1.3	1.2	1.3	1.1	0.9	0.7	0.0	0.6	0.7	0.7	1.3	1.2	0.8	0.7	1.0
1962...	1.0	1.0	0.9	0.9	0.7	0.0	0.0	0.0	0.7	0.7	0.9	0.7	1.0	0.0	0.0	0.0	0.0
1963...	1.5	1.2	1.5	1.2	1.2	1.2	0.9	0.0	0.9	1.0	1.1	1.2	1.4	1.2	0.9	1.1	1.1
1964...	1.9	1.6	1.6	1.4	1.4	1.5	1.3	1.1	1.0	1.1	0.0	0.9	1.7	1.5	1.1	0.9	1.3
1965...	1.3	1.0	0.9	0.0	0.7	0.6	0.7	0.5	0.5	0.4	0.4	0.4	1.1	0.7	0.6	0.4	0.7
1966...	0.4	0.3	0.3	0.4	0.4	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.4
1967...	0.6	0.4	0.6	0.6	0.4	0.5	0.5	0.4	0.5	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5
1968...	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.6	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.7	0.6
1969...	1.0	0.0	0.0	0.7	0.6	0.7	0.0	1.0	1.0	1.0	1.2	1.2	0.9	0.7	0.9	1.1	0.9
1970...	2.2	2.0	2.7	2.1	1.7	1.7	1.5	2.0	1.0	2.1	2.1	1.0	2.3	1.0	1.0	2.1	2.0

Appendix C. HISTORICAL DATA—Continued

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
655. LAYOFF RATE, DEFENSE PRODUCTS INDUSTRIES, SEASONALLY ADJUSTED (PER 100 EMPLOYEES)																	
													AVERAGE FOR PERIOD				
1958...	2.1	1.9	1.6	1.7	1.6	1.4	1.0	1.2	1.1	1.2	0.9	1.2	1.9	1.6	1.1	1.1	
1959...	1.3	0.9	1.0	0.9	1.0	0.8	1.1	1.2	1.2	1.3	1.4	1.2	1.1	0.9	1.2	1.3	
1960...	1.2	1.2	1.3	1.6	1.3	1.3	1.3	1.2	1.2	1.3	1.1	1.2	1.2	1.4	1.2	1.2	
1961...	0.9	1.3	1.1	1.1	1.3	1.1	0.9	0.9	1.0	0.7	0.8	0.8	1.1	1.2	0.9	0.8	
1962...	0.7	0.8	0.7	0.8	0.7	0.8	0.9	1.0	0.9	0.8	1.0	0.8	0.7	0.8	0.9	0.9	
1963...	1.2	1.0	1.4	1.1	1.1	1.2	1.0	1.0	1.1	1.1	1.2	1.3	1.2	1.1	1.0	1.2	
1964...	1.6	1.5	1.3	1.3	1.5	1.3	1.3	1.3	1.3	1.1	1.2	0.9	1.0	1.4	1.2	1.0	
1965...	1.0	0.9	0.8	0.7	0.7	0.6	0.7	0.6	0.6	0.5	0.5	0.5	0.9	0.7	0.6	0.5	
1966...	0.2	0.2	0.2	0.4	0.4	0.3	0.5	0.4	0.4	0.5	0.4	0.4	0.2	0.4	0.4	0.4	
1967...	0.4	0.3	0.6	0.6	0.4	0.6	0.5	0.6	0.5	0.5	0.7	0.6	0.4	0.5	0.5	0.6	
1968...	0.4	0.6	0.3	0.5	0.7	0.6	0.6	0.7	0.6	0.7	0.7	0.6	0.5	0.6	0.7	0.7	
1969...	0.7	0.6	0.6	0.6	0.7	0.9	0.9	1.1	1.1	1.0	1.2	1.3	0.6	0.7	1.0	1.2	
1970...	1.9	1.0	2.5	2.0	1.0	1.9	1.7	2.1	1.9	2.1	2.2	1.9	2.1	1.9	1.9	2.1	
1971...	2.1	1.9	2.9	2.3	1.6	1.4	1.3	1.2	1.3	1.4	1.2	1.1	2.0	1.8	1.3	1.2	
1972...	0.9	1.0	0.8	0.8	0.8	0.8	0.8	0.6	0.7	0.5	0.5	0.8	0.9	0.7	0.5	0.8	
1973...	0.5	0.4	0.5	0.5	0.6	0.6	0.8	0.6	0.5	0.6	0.6	0.6	0.5	0.6	0.6	0.6	
1974...	0.4	0.5	0.4	0.5	0.6	0.6	0.5	0.6	0.6	0.7	0.7	0.8	0.4	0.6	0.6	0.7	
1975...	1.1	1.2	1.3	1.3	1.3	1.4	1.3	1.3	1.2	1.1	0.7	0.8	1.4	1.3	1.2	0.8	
1976...	1.0	0.7	0.7	0.5	0.6	0.7	0.5	0.7	0.8	0.8	0.5	0.4	0.8	0.6	0.8	0.6	
1977...																	
656. LAYOFF RATE, DEFENSE PRODUCTS INDUSTRIES, 4-MONTH MOVING AVERAGE OF SEASONALLY ADJUSTED DATA (PER 100 EMPLOYEES)																	
1958...	...	...	1.0	1.7	1.6	1.4	1.3	1.2	1.1	1.1	1.1	1.2					
1959...	1.1	1.1	1.0	1.2	0.9	1.0	1.2	1.1	1.2	1.3	1.2	1.3					
1960...	1.3	1.2	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.1					
1961...	1.1	1.1	1.1	1.2	1.2	1.1	1.1	1.0	0.9	0.9	0.8	0.8					
1962...	0.8	0.8	0.8	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0					
1963...	1.0	1.1	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.2	1.3					
1964...	1.4	1.5	1.5	1.5	1.5	1.4	1.4	1.3	1.2	1.1	1.1	1.0					
1965...	1.3	0.9	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7					
1966...	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4					
1967...	0.4	0.4	0.5	0.5	0.6	0.5	0.5	0.6	0.5	0.6	0.6	0.5					
1968...	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7					
1969...	0.7	0.6	0.6	0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.1	1.2					
1970...	1.5	1.9	2.0	2.0	2.0	1.8	1.9	1.9	1.9	2.1	2.0	2.1					
1971...	2.0	2.0	2.1	1.9	1.8	1.6	1.4	1.3	1.3	1.3	1.3	1.1					
1972...	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.5					
1973...	0.3	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5					
1974...	0.3	0.5	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.8					
1975...	1.0	1.2	1.4	1.4	1.5	1.2	1.2	1.2	1.2	1.1	0.9	0.8					
1976...	0.8	0.8	0.7	0.6	0.6	0.6	0.7	0.8	0.8	0.7	0.6	0.6					
1977...																	
657. OUTPUT OF DEFENSE AND SPACE EQUIPMENT, SEASONALLY ADJUSTED ¹ (INDEX: 1967=100)																	
													AVERAGE FOR PERIOD				
1947...	9.9	9.8	9.6	9.6	9.5	9.4	9.4	9.3	9.3	9.6	9.9	10.0	9.8	9.5	9.3	9.8	
1948...	10.1	10.5	10.7	11.0	10.7	11.1	11.3	11.6	11.8	12.1	12.3	12.3	10.4	10.9	11.6	12.2	
1949...	12.1	12.1	12.1	11.9	12.0	12.1	12.0	11.9	11.6	11.3	11.2	11.2	12.1	12.0	11.8	11.2	
1950...	11.1	11.1	11.2	11.0	11.9	12.3	12.9	14.2	15.6	16.9	18.0	19.5	11.1	11.9	14.2	18.1	
1951...	21.7	25.0	28.4	31.2	32.2	33.9	35.9	37.1	38.2	39.9	42.1	43.0	25.0	32.4	37.1	41.7	
1952...	43.0	44.2	44.3	44.8	46.3	47.7	47.9	48.0	49.5	51.2	52.2	53.0	44.1	46.3	48.7	52.4	
1953...	54.6	55.8	56.0	57.6	58.6	58.9	59.4	59.0	59.0	58.4	54.6	55.0	55.7	58.4	59.1	58.0	
1954...	58.0	57.6	56.8	55.8	55.0	54.1	53.9	52.8	52.3	51.0	51.5	50.7	57.5	55.0	53.0	51.3	
1955...	50.4	50.4	50.1	50.0	50.0	49.5	49.5	49.1	49.2	49.0	49.0	49.1	50.3	49.8	49.3	49.0	
1956...	48.5	48.1	47.1	47.4	47.5	47.5	47.5	48.1	48.5	49.8	50.6	51.7	47.9	47.5	48.0	50.7	
1957...	51.9	52.2	52.1	52.3	51.5	51.0	51.2	51.3	50.2	49.0	47.4	47.0	52.1	51.9	50.9	47.8	
1958...	47.6	47.9	48.9	49.7	50.2	51.6	51.7	52.2	52.5	52.5	52.9	53.0	48.1	50.5	52.1	52.8	
1959...	53.2	52.7	52.9	53.2	53.7	53.6	54.0	53.7	54.0	53.9	53.9	54.3	52.9	53.6	53.9	54.0	
1960...	54.7	55.0	55.3	54.9	55.5	54.1	55.5	55.7	55.6	55.1	55.1	54.4	55.0	54.8	55.4	54.9	
1961...	55.0	54.6	54.5	54.6	54.6	54.6	55.0	55.3	56.4	57.7	59.1	60.2	54.7	54.6	55.6	59.0	
1962...	60.9	61.9	62.7	63.3	63.7	64.4	65.8	66.5	66.7	66.9	67.4	67.9	61.9	63.8	66.3	67.5	
1963...	71.0	70.5	70.1	70.0	70.0	69.9	69.3	69.5	69.8	69.0	69.5	69.7	70.5	70.0	69.3	69.7	
1964...	69.0	68.4	68.3	68.1	66.9	66.5	66.4	66.7	67.2	67.6	68.3	69.0	68.6	67.3	66.8	68.2	
1965...	69.6	70.4	71.4	72.5	74.1	75.0	76.2	76.8	76.9	77.9	78.6	79.4	70.5	73.9	76.6	78.6	
1966...	81.1	82.3	83.0	84.8	86.3	87.6	88.8	89.0	91.1	92.5	94.2	95.2	82.1	86.2	90.0	94.0	
1967...	96.8	97.2	97.0	98.3	98.5	98.2	99.1	100.0	101.2	103.0	104.4	105.6	97.3	99.3	101.1	104.9	
1968...	106.5	108.4	107.3	105.9	108.2	109.5	109.7	110.3	110.2	107.2	108.0	107.2	107.4	107.9	110.1	107.5	
1969...	107.1	106.3	106.9	106.3	106.1	104.6	104.5	103.1	102.8	101.7	99.9	98.6	106.6	105.7	103.5	105.1	
1970...	97.1	95.5	93.7	91.7	89.8	88.2	86.8	85.8	84.9	83.6	82.9	81.9	95.4	95.9	95.8	92.8	
1971...	82.0	79.8	79.3	79.3	80.3	78.0	78.3	78.3	78.1	77.7	77.6	76.9	80.4	79.5	78.2	77.4	
1972...	70.2	79.4	79.4	79.7	79.6	80.3	80.2	80.1	79.9	79.0	80.9	81.2	79.0	79.9	80.1	80.6	
1973...	81.6	81.7	81.2	80.8	80.9	81.2	81.8	80.7	81.5	81.7	81.8	82.2	81.3	81.0	81.3	81.9	
1974...	81.9	81.6	81.8	81.1	82.7	82.1	82.6	83.0	83.2	83.7	83.2	82.4	81.8	82.0	82.9	83.1	
1975...	82.1	79.9	79.7	80.2	80.9	81.6	81.0	80.6	81.2	78.5	77.3	77.7	80.6	80.9	80.9	77.0	
1976...	80.5	80.1	79.5	78.4	78.1	77.5	77.5	78.5	77.4	78.0	77.6	77.2	80.0	78.0	77.9	77.6	
1977...																	

NOTE: Unless otherwise noted, these series contain no revisions but are reprinted for the convenience of the user. ¹This series contains revisions beginning with 1954.

(OCTOBER 1977)

Appendix C. HISTORICAL DATA—Continued

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
670. EMPLOYMENT IN DEFENSE PRODUCTS INDUSTRIES, TOTAL, NOT SEASONALLY ADJUSTED (THOUSANDS)																	
1958...	1,227	1,216	1,214	1,209	1,196	1,208	1,212	1,223	1,237	1,242	1,257	1,261	1,219	1,204	1,224	1,253	1,225
1959...	1,258	1,260	1,259	1,256	1,253	1,257	1,267	1,270	1,277	1,270	1,270	1,268	1,259	1,255	1,271	1,289	1,264
1960...	1,259	1,253	1,248	1,234	1,220	1,189	1,201	1,222	1,227	1,223	1,242	1,246	1,253	1,214	1,217	1,237	1,236
1961...	1,243	1,245	1,248	1,243	1,243	1,244	1,246	1,249	1,265	1,270	1,293	1,265	1,245	1,243	1,253	1,292	1,258
1962...	1,312	1,321	1,329	1,325	1,328	1,336	1,340	1,362	1,371	1,374	1,382	1,384	1,321	1,330	1,340	1,380	1,346
1963...	1,379	1,370	1,357	1,345	1,336	1,333	1,327	1,325	1,330	1,332	1,326	1,329	1,369	1,338	1,327	1,339	1,341
1964...	1,316	1,297	1,287	1,273	1,257	1,248	1,238	1,230	1,230	1,235	1,238	1,237	1,308	1,259	1,238	1,237	1,258
1965...	1,235	1,226	1,232	1,224	1,240	1,245	1,262	1,272	1,280	1,281	1,323	1,342	1,231	1,240	1,275	1,322	1,267
1966...	1,365	1,385	1,406	1,426	1,445	1,471	1,497	1,520	1,539	1,557	1,584	1,587	1,303	1,447	1,519	1,576	1,482
1967...	1,594	1,616	1,630	1,630	1,630	1,654	1,666	1,670	1,688	1,702	1,719	1,725	1,413	1,643	1,675	1,715	1,662
1968...	1,726	1,726	1,720	1,708	1,701	1,712	1,715	1,718	1,712	1,694	1,710	1,710	1,724	1,706	1,715	1,705	1,712
1969...	1,698	1,675	1,689	1,678	1,670	1,652	1,657	1,632	1,631	1,617	1,587	1,572	1,607	1,647	1,641	1,592	1,647
1970...	1,552	1,524	1,503	1,465	1,431	1,416	1,397	1,367	1,357	1,324	1,306	1,288	1,506	1,437	1,374	1,366	1,411
1971...	1,267	1,248	1,222	1,184	1,171	1,163	1,147	1,141	1,144	1,135	1,130	1,121	1,240	1,173	1,144	1,139	1,171
1972...	1,116	1,117	1,116	1,110	1,119	1,123	1,124	1,126	1,137	1,144	1,157	1,161	1,116	1,130	1,129	1,154	1,130
1973...	1,160	1,160	1,156	1,156	1,155	1,163	1,164	1,167	1,175	1,178	1,183	1,185	1,159	1,159	1,169	1,189	1,167
1974...	1,181	1,176	1,175	1,174	1,170	1,175	1,176	1,140	1,185	1,196	1,196	1,184	1,177	1,173	1,167	1,182	1,177
1975...	1,178	1,141	1,137	1,121	1,131	1,123	1,110	1,100	1,104	1,097	1,089	1,088	1,152	1,125	1,105	1,091	1,110
1976...	1,084	1,075	1,071	1,066	1,061	1,060	1,043	1,053	1,062	1,062	1,066	1,070	1,077	1,062	1,053	1,066	1,064
1977...																	
670. EMPLOYMENT IN DEFENSE PRODUCTS INDUSTRIES, TOTAL, SEASONALLY ADJUSTED (THOUSANDS)																	
1958...	1,210	1,211	1,210	1,212	1,210	1,222	1,224	1,229	1,233	1,239	1,246	1,249	1,213	1,213	1,229	1,245	
1959...	1,249	1,254	1,255	1,259	1,267	1,271	1,280	1,277	1,274	1,266	1,259	1,256	1,253	1,266	1,277	1,280	
1960...	1,250	1,246	1,244	1,240	1,233	1,201	1,213	1,226	1,224	1,210	1,230	1,232	1,247	1,225	1,222	1,227	
1961...	1,235	1,240	1,244	1,240	1,255	1,257	1,259	1,255	1,262	1,274	1,283	1,292	1,240	1,253	1,259	1,283	
1962...	1,303	1,316	1,326	1,330	1,340	1,350	1,361	1,369	1,369	1,370	1,371	1,371	1,315	1,340	1,366	1,371	
1963...	1,369	1,366	1,354	1,350	1,347	1,345	1,337	1,332	1,328	1,328	1,317	1,310	1,363	1,347	1,333	1,323	
1964...	1,307	1,294	1,285	1,278	1,266	1,258	1,246	1,235	1,236	1,232	1,231	1,228	1,295	1,267	1,259	1,230	
1965...	1,220	1,224	1,230	1,237	1,247	1,254	1,267	1,276	1,289	1,300	1,315	1,331	1,227	1,246	1,277	1,315	
1966...	1,357	1,362	1,406	1,430	1,457	1,478	1,502	1,525	1,537	1,554	1,573	1,579	1,382	1,455	1,521	1,569	
1967...	1,580	1,614	1,630	1,645	1,650	1,662	1,666	1,675	1,686	1,699	1,709	1,718	1,413	1,643	1,675	1,715	
1968...	1,719	1,723	1,719	1,713	1,713	1,718	1,717	1,725	1,708	1,691	1,701	1,703	1,720	1,715	1,717	1,690	
1969...	1,691	1,672	1,689	1,686	1,682	1,658	1,659	1,643	1,627	1,613	1,580	1,565	1,604	1,635	1,643	1,586	
1970...	1,546	1,531	1,503	1,472	1,441	1,421	1,400	1,373	1,353	1,321	1,299	1,281	1,549	1,445	1,375	1,360	
1971...	1,262	1,230	1,213	1,190	1,179	1,167	1,150	1,147	1,141	1,132	1,123	1,114	1,238	1,179	1,146	1,123	
1972...	1,111	1,115	1,117	1,123	1,126	1,126	1,128	1,131	1,134	1,140	1,140	1,134	1,114	1,125	1,131	1,147	
1973...	1,150	1,159	1,159	1,162	1,164	1,167	1,171	1,174	1,171	1,171	1,171	1,171	1,158	1,164	1,172	1,172	
1974...	1,177	1,176	1,180	1,181	1,179	1,179	1,181	1,147	1,181	1,188	1,183	1,173	1,178	1,180	1,173	1,181	
1975...	1,175	1,141	1,142	1,128	1,140	1,127	1,117	1,108	1,100	1,090	1,077	1,075	1,153	1,122	1,108	1,081	
1976...	1,081	1,076	1,077	1,072	1,070	1,064	1,050	1,060	1,059	1,056	1,054	1,060	1,078	1,069	1,056	1,057	
1977...																	
671. EMPLOYMENT IN DEFENSE PRODUCTS INDUSTRIES, PRODUCTION WORKERS, NOT SEASONALLY ADJUSTED (THOUSANDS)																	
1958...	761	749	745	738	722	731	721	728	740	744	753	755	752	730	730	750	740
1959...	749	746	742	734	729	728	724	723	730	726	723	720	746	730	726	723	731
1960...	712	707	701	690	677	641	654	663	670	668	678	675	707	669	662	674	678
1961...	672	667	666	660	657	655	650	652	667	678	689	693	668	657	656	687	667
1962...	695	698	698	689	688	686	690	701	703	706	711	711	697	680	698	709	698
1963...	711	701	694	687	680	678	671	672	678	682	677	682	702	682	678	684	684
1964...	676	664	658	651	640	634	627	625	638	636	640	641	666	642	630	639	644
1965...	639	632	636	640	643	643	653	663	679	688	705	718	636	642	665	704	663
1966...	734	747	761	773	786	797	811	827	846	861	881	883	747	785	828	875	809
1967...	886	905	914	914	915	921	924	928	940	935	964	974	902	917	930	944	928
1968...	974	968	964	954	947	955	951	954	955	940	952	948	969	952	953	947	955
1969...	941	927	934	924	919	903	907	892	896	888	885	856	924	915	898	870	904
1970...	837	816	804	780	758	753	738	723	724	699	691	680	819	764	730	690	750
1971...	667	650	629	608	607	600	591	589	593	585	584	570	649	605	591	582	607
1972...	575	578	577	578	578	582	583	586	595	600	613	618	577	579	580	610	589
1973...	615	616	614	613	611	616	617	616	623	626	627	632	615	613	619	639	619
1974...	627	623	621	620	615	616	612	576	621	632	634	623	624	617	603	630	618
1975...	618	589	585	570	581	573	564	555	556	554	549	549	597	575	559	551	570
1976...	545	540	537	533	530	529	510	520	529	529	532	533	541	531	520	531	531
1977...																	
671. EMPLOYMENT IN DEFENSE PRODUCTS INDUSTRIES, PRODUCTION WORKERS, SEASONALLY ADJUSTED (THOUSANDS)																	
1958...	751	742	740	741	732	744	738	738	738	739	741	743	744	739	738	741	
1959...	738	739	737	737	739	739	740	732	729	721	712	708	738	738	734	714	
1960...	702	700	696	692	686	652	668	672	669	663	667	663	699	677	670	664	
1961...	663	651	662	664	666	666	664	660	666	673	679	681	662	655	653	678	
1962...	686	692	694	693	697	698	704	710	703	701	701	699	691	696	706	700	
1963...	701	696	691	690	687	689	683	681	670	670	669	671	696	689	681	673	
1964...	660	656	651	648	638	637	630	623	638	633	633	638	651	647	637	632	
1965...	632	620	634	641	648	652	663	670	680	686	699	707	631	647	671	697	
1966...	726	743	759														

Appendix C. HISTORICAL DATA—Continued

Year	Monthly												Quarterly				Annual
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	I Q	II Q	III Q	IV Q	
673. INDEX OF AGGREGATE WEEKLY HOURS, DEFENSE PRODUCTS INDUSTRIES, NOT SEASONALLY ADJUSTED (1967=100)																	
1958...	72.3	71.4	71.5	71.0	70.4	71.2	71.2	72.2	73.2	73.3	74.3	75.0	71.7	70.9	72.2	74.2	72.2
1959...	74.6	74.5	74.4	74.2	74.1	74.6	74.8	75.2	75.7	75.4	75.3	75.6	74.5	74.3	75.2	75.4	74.9
1960...	74.7	74.0	73.8	72.3	72.2	70.2	70.7	72.2	72.6	72.6	73.7	73.7	74.2	71.6	71.8	73.3	72.7
1961...	74.0	73.9	74.0	73.5	73.3	73.4	73.4	73.9	75.3	76.1	77.3	78.5	74.0	73.4	74.2	77.3	74.7
1962...	76.3	76.9	79.4	79.2	79.2	79.6	79.9	80.9	81.8	82.1	82.7	83.0	78.9	79.3	80.9	82.6	80.4
1963...	82.4	81.5	88.4	79.3	79.1	79.1	78.5	78.5	79.1	79.2	78.6	79.2	81.4	79.2	78.7	79.0	79.6
1964...	78.0	76.7	76.1	75.4	74.3	74.0	73.1	72.8	73.3	73.5	73.9	74.1	76.9	74.6	73.1	73.8	74.6
1965...	73.7	73.0	73.6	72.9	74.0	74.5	75.2	76.0	77.0	76.3	80.1	82.0	73.4	73.0	76.1	80.1	75.9
1966...	83.4	84.3	85.3	86.1	87.9	89.3	90.2	91.9	93.3	94.2	96.2	96.3	84.3	87.8	91.8	95.6	89.9
1967...	96.4	96.9	99.2	98.4	98.5	99.2	99.6	100.1	101.6	102.9	103.4	104.7	97.2	98.7	100.4	103.6	100.0
1968...	103.3	103.9	103.0	100.2	101.6	102.7	102.2	102.7	102.7	101.4	102.4	102.7	101.4	101.5	102.5	102.2	102.4
1969...	100.9	99.1	100.9	99.6	99.4	98.4	98.0	97.3	97.7	96.7	95.4	95.0	100.3	99.1	97.7	95.7	98.2
1970...	92.8	90.5	89.3	86.7	84.6	83.7	82.0	80.5	79.8	78.2	77.5	76.9	90.9	85.0	88.0	77.5	83.5
1971...	75.0	72.8	73.6	69.4	69.1	68.7	67.4	67.2	67.5	67.1	67.2	67.0	73.1	69.1	67.4	67.1	69.2
1972...	66.1	66.3	66.4	66.3	66.4	66.9	66.3	66.8	67.8	68.1	69.2	69.7	66.3	66.5	67.6	69.0	67.2
1973...	68.7	69.1	68.8	68.5	68.7	69.1	68.7	69.0	70.1	70.0	70.7	71.2	68.9	68.8	69.3	70.6	69.4
1974...	69.8	69.6	69.7	68.7	69.4	69.3	68.7	68.3	69.7	70.4	70.7	70.5	69.7	69.1	68.2	70.5	69.4
1975...	69.2	67.0	68.8	66.1	66.8	66.8	65.8	64.9	65.5	64.9	64.8	65.0	67.7	68.3	69.1	64.8	66.0
1976...	64.1	63.5	63.3	62.0	62.8	62.6	61.3	62.0	62.4	62.4	63.5	64.1	63.6	62.4	61.9	63.3	62.8
1977...																	
673. INDEX OF AGGREGATE WEEKLY HOURS, DEFENSE PRODUCTS INDUSTRIES, SEASONALLY ADJUSTED (1967=100)																	
1958...	71.5	71.1	71.3	71.5	71.5	72.1	72.3	72.6	72.9	73.1	73.5	73.7	71.3	71.7	72.6	73.6	
1959...	73.8	74.1	74.2	74.7	75.2	75.5	75.9	75.7	75.4	75.1	74.5	74.3	74.0	74.1	75.7	74.6	
1960...	73.9	73.6	73.6	72.8	73.3	71.1	71.8	72.7	72.3	72.2	72.8	72.3	73.7	72.4	72.3	72.4	
1961...	73.3	73.6	73.9	74.1	74.3	74.3	74.5	74.5	75.1	75.7	76.4	77.1	73.6	74.2	74.7	76.4	
1962...	77.5	78.6	79.2	79.8	80.2	80.5	81.0	81.6	81.6	81.7	81.7	81.5	78.4	80.2	81.4	81.6	
1963...	81.6	81.3	80.3	80.0	79.9	79.9	79.5	79.1	79.0	78.8	77.7	77.9	81.1	79.9	79.2	78.1	
1964...	77.2	76.5	76.3	76.2	75.0	74.6	73.9	73.3	73.2	73.2	73.0	73.0	76.6	75.3	73.5	73.1	
1965...	73.8	72.9	73.6	73.6	74.6	75.0	75.9	76.5	76.9	76.0	78.2	80.8	73.3	74.2	76.6	79.3	
1966...	82.8	84.3	85.2	87.0	88.5	89.8	90.9	92.4	93.2	93.9	95.2	95.0	84.1	88.4	92.2	94.7	
1967...	95.8	97.0	98.1	99.4	99.3	99.8	100.3	100.6	101.4	102.1	102.8	103.3	97.0	99.5	100.8	102.7	
1968...	102.9	104.0	103.9	101.1	102.4	103.3	102.9	103.2	102.4	101.1	101.4	101.2	103.1	102.3	102.8	101.2	
1969...	100.6	99.3	100.8	100.4	100.2	98.9	98.0	97.4	97.3	96.4	94.6	93.5	100.2	99.4	98.0	94.8	
1970...	92.6	90.7	89.2	87.4	85.3	84.1	82.7	81.0	79.5	77.9	76.7	75.7	90.8	85.6	81.1	76.8	
1971...	74.9	72.7	71.5	70.0	69.7	69.0	68.1	67.7	67.2	66.9	66.5	65.9	73.0	69.6	67.7	66.4	
1972...	66.0	66.3	66.4	66.8	66.9	67.1	67.0	67.3	67.5	67.8	68.3	68.5	68.2	66.9	67.3	68.2	
1973...	68.6	69.1	68.9	69.2	69.1	69.3	69.7	69.7	69.7	69.6	69.6	69.6	68.9	69.2	69.7	69.7	
1974...	69.8	69.6	69.9	69.4	69.8	69.5	69.8	67.0	69.3	70.0	69.5	69.1	69.8	69.6	68.7	69.5	
1975...	69.2	67.0	67.0	66.8	66.8	66.6	66.1	65.6	66.1	64.5	63.5	63.8	67.7	66.7	65.6	63.9	
1976...	64.1	63.5	63.6	62.7	63.0	62.8	62.2	62.7	62.0	62.0	62.5	62.7	63.7	62.8	62.3	62.4	
1977...																	
675. INDEX OF AGGREGATE WEEKLY PAYROLLS, PRODUCTION WORKERS, DEFENSE PRODUCTS INDUSTRIES, NOT SEASONALLY ADJUSTED (1967=100)																	
1958...	57.1	55.8	56.0	55.4	54.6	56.3	55.7	57.0	58.4	58.4	59.4	60.5	56.3	55.5	57.0	59.4	57.1
1959...	59.8	58.5	59.4	58.5	57.4	59.8	58.4	59.4	61.3	60.9	61.3	62.2	59.4	58.7	59.9	59.7	59.2
1960...	58.7	58.1	57.7	55.5	55.7	52.9	53.6	55.0	56.2	56.2	57.2	57.2	58.2	54.7	54.9	56.9	56.2
1961...	57.2	56.9	56.7	55.9	55.2	55.4	55.1	55.9	56.7	59.5	60.9	62.2	56.9	55.5	56.4	60.9	57.4
1962...	61.6	61.8	61.9	61.3	61.0	60.7	60.7	62.0	63.7	64.0	64.7	65.4	61.8	61.0	62.0	64.7	62.4
1963...	64.8	63.6	62.2	60.8	61.0	61.6	60.8	61.3	62.8	63.2	62.6	63.7	63.5	61.1	61.6	63.2	62.4
1964...	62.3	61.1	60.6	60.1	59.3	59.2	58.1	58.6	60.1	60.8	61.4	62.3	61.3	59.5	58.9	61.5	60.3
1965...	61.5	60.8	61.8	60.6	62.9	63.2	63.8	65.1	67.1	69.3	72.5	75.4	61.4	62.2	65.3	72.4	65.3
1966...	77.1	78.1	79.1	79.7	82.9	83.5	84.4	86.7	89.4	91.3	94.3	94.5	78.1	82.0	86.8	93.4	85.1
1967...	94.7	95.3	97.2	96.9	97.6	98.0	98.1	99.5	102.2	104.3	106.7	109.6	95.7	97.5	99.9	106.9	100.0
1968...	107.0	107.3	105.7	100.4	103.8	105.7	104.3	106.0	108.2	107.4	109.4	110.6	106.7	103.3	106.2	109.1	106.3
1969...	102.9	105.0	108.3	106.2	106.6	105.3	104.8	105.3	107.5	107.1	106.2	107.0	107.2	106.0	105.9	106.8	106.5
1970...	102.7	99.1	97.9	94.6	91.6	91.3	88.9	88.1	88.9	86.9	87.6	88.0	90.9	82.5	88.6	87.5	92.1
1971...	84.6	80.8	79.5	75.6	76.9	76.3	74.5	75.2	76.7	76.3	77.0	78.3	81.6	76.3	75.5	77.2	77.6
1972...	76.2	78.0	78.9	79.3	79.4	80.7	79.3	82.0	84.8	85.9	89.3	92.1	77.7	79.8	82.0	89.1	82.2
1973...	86.7	89.9	89.9	89.0	89.9	90.7	90.2	91.8	95.2	95.7	97.5	100.5	89.5	89.9	92.4	97.9	92.4
1974...	96.7	96.5	97.0	94.1	97.6	96.9	94.9	89.6	99.8	103.2	105.3	106.3	96.7	96.2	94.8	104.9	96.5
1975...	102.8	98.6	99.1	97.6	100.2	101.2	97.9	98.3	102.0	101.5	101.8	104.9	100.2	99.7	99.4	102.7	100.5
1976...	101.3	100.7	100.8	96.1	99.2	99.4	96.0	99.2	101.9	104.0	106.5	109.2	100.9	98.2	99.0	106.6	101.2
1977...																	
675. INDEX OF AGGREGATE WEEKLY PAYROLLS, PRODUCTION WORKERS, DEFENSE PRODUCTS INDUSTRIES, SEASONALLY ADJUSTED (1967=100)																	
1958...	55.9	55.3	55.8	56.2	56.3	57.6	57.4	57.8	57.9	57.8	58.2	58.6	55.7	56.7	57.7	58.2	
1959...	58.6	58.9	58.7	59.3	60.0	60.7	60.3	59.6	59.2	59.1	58.2	58.0	58.7	60.0	59.7	58.4	
1960...	57.3	57.5	57.5	56.3	57.1	54.1	55.3	55.8	55.8	55.5	55.9	55.3	57.3	55.8	55.6	55.6	
1961...	56.1	56.3	56.5	56.8	56.6	56.6	56.9	56.0	57.9	58.7	59.5	60.2	56.3	56.7	57.2	59.5	
1962...	60.4	61.2	61.8	62.2	62.4	61.9	62.7	63.1	63.0	63.2	63.2	63.2	61.1	62.2	62.9	63.2	
1963...	63.5	63.1	62.1	61.8	62.3	62.7	62.6	62.4	62.6	62.4	62.1	61.5	62.9	62.3	62.7	62.7	
1964...	61.1	60.7	60.5	61.1	60.4	60.2	59.7	59.7	60.0	60.1	60.0	60.2	60.8	60.6	59.8	60.1	
1965...	60.4	60.5	61.7	61.6	64.0	64.2	65.5	66.2	67.0	68.6	70.9	72.9	60.9	63.3	66.2	70.8	
1966...	75.8	77.9	78.9	81.1	8												





ALPHABETICAL INDEX—SERIES FINDING GUIDE

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						Unpaid obligations outstanding—See Obligations outstanding.					

